

FORMERS VERSUS ZONERS
HOW AND WHY COMMUNITIES SHIFT TO FORM-BASED ZONING

A Dissertation
Presented to
The Academic Faculty

By

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In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Philosophy in City and Regional Planning

Georgia Institute of Technology

December, 2014

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PREFACE

Zoning is complicated. Developers dread the expensive and time-consuming zoning fight, while lawyers relish the puzzle, public hearings and fees. The public despises the complicated and time-consuming effort it takes to contest the project. Planners enjoy the intrigue that accompanies the hard fought battle. Since the inception of zoning, the battles have a tradition of being legendarily long in many communities.

Zoning is the foundation of city planning. Planners have the power to regulate the use and form of privately owned land—an enormous task. The city’s future development hinges on zoning (Williams 1922). The 1948 planner’s *green book* states that with zoning “benefits can be accomplished... but poor zoning may be worse than no zoning at all,” and it is the planner’s tool for the “accomplishment of a substantial portion of the city plan” (Local Planning Administration 1948, 222).

Practitioners realize that zoning puzzles are solved by understanding five elements: the community, planning officials, surrounding land uses, characteristics of the property and the intricacies of the zoning code. By combining the knowledge of each of these elements, zoning conflicts are resolved, master plans negotiated, and land successfully rezoned. But leave one issue unresolved and the risk of rejection by the planning and/or zoning commission increases, sacrificing the opportunity to improve density and consequently land value. In many locations it could take a one or two year “wait and see” moratorium before the opportunity to resubmit for zoning arises.

Mandelker (2009) describes form-based code in the current *green book* as a recent innovation to “shape the form of development rather than the use,” focusing on “building types, horizontal and vertical mix of land uses, design character, the continuity of streets, pedestrian orientation, mixed uses” (Mandelker 2009, 289). But is that enough? Form-based code appears oriented primarily to residential areas and suburbs based on conversations with advocates and practitioners (Parolek, Parolek, and Crawford 2008, Duany, Plater-Zyberk, and Speck 2000).

Initial research illustrates that form-based code is hard to implement and does not appear to adequately address downtown, institutional and industrial land use (Leigh and Hoelzel 2012, Underdahl 2012). For example, Denver’s new zoning does not include a recoding of the downtown conventional Euclidean code. Likewise, Miami’s Jackson Memorial Hospital District conventional zoning is included in the Miami 21 code. In each city, the conventional code for these specific locations is pasted into the newly adopted form-based code to avoid the complex, time-consuming process of recoding the entire city at one time. Nashville and Cincinnati are moving to form-based code by neighborhood and district instead of reworking their entire city.

The subject of this research is why and how communities change to form-based code. This research examines the state of practice with form-based code and investigates whether practitioners believe that form-based zoning code will solve these issues, making zoning easier for a community.

ACKNOWLEDGMENTS

I owe special thanks to my committee, who provided me with thoughtful and dedicated advice to keep this challenging project on track. Especially deserving is my outstanding advisor, Dr. Catherine Ross, for her exceptional guidance and kind friendship throughout the many outlines and conversations required to keep me focused. Dr. Marilyn A. Brown, Dr. Gary Hack, Dr. Nancey Green Leigh, Dr. Frederick Steiner, and Dr. Bruce Stiffler were exceedingly generous with their knowledge, advice, direction and time.

For their guidance, advice and insight into form-based code and suggestions on how to portray valuable information, thank you to Rick Bernhardt, Ellen Dunham-Jones, Beth Dunlop, Ana Gelabert-Sanchez, Luciana Gonzalez, Neisen Kasdin, Elizabeth Plater-Zyberk, Roxanne Qualls, Jeff Speck, Emily Talen, and Julie Underdahl.

Thank you to my friends and colleagues who supported me by sharing their professional viewpoints through endless discussions: Liz Batchelder, Ellen Heath, Sian Llewellyn, Kathy Schumann and Terry Rixse. I could not have completed this without each of you.

My family support was a valuable and happy diversion throughout this process.

TABLE OF CONTENTS

	Page
PREFACE	iii
ACKNOWLEDGEMENTS	v
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xiv
SUMMARY	xvi
CHAPTER 1: ZONERS AND FORMERS	1
1.1 Purpose of the Study	4
1.2 Problem Statement	6
1.3 Vignettes from Practice	12
1.3.1 Dorchester County, South Carolina	13
1.3.2 Alexandria, Virginia	15
1.3.3 Imagine Austin, Texas	16
1.4 Definition and Process for Form-Based Code	18
1.4.1 Ten Key Principles	20
1.4.2 Components and Process	22
CHAPTER 2: THE ORIGINS OF FORM-BASED CODE	24
2.1 Foundation of the Transect in Central Place Theory	25
2.1.1 Creating Zoning and Form by a Mosaic of Land Interests	32

2.1.2 Form, Function, Power and Regional Impact	33
2.1.3 Design and the Ideal City	35
2.1.4 Sustainability	37
2.2 Euclidean Zoning as a Panacea	38
2.2.1 Conventional Zoning as a Good Faith Effort	41
2.3 Zoning is Destiny	43
2.4 Form-Based Code	45
2.4.1 Precursors to Form-Based Code	48
2.4.2 Acceptance of Form-Based Code	51
2.4.3 Definition and Regulation	52
2.4.4 The Negatives of Form-Based Code	55
CHAPTER 3: STUDYING FORM-BASED CODE IN PRACTICE	58
3.1 Two Protocols	60
3.2 Protocol One—Survey Planning Officials	61
3.3 Protocol Two—Cincinnati, Denver, and Miami Case Studies	65
CHAPTER 4: PROTOCOL ONE—SURVEY OF PLANNING PROFESSIONALS	68
4.1 Position and Zoning Experience of All Respondents	69
4.2 Form-Based Code Experience and Status in the Respondents' Community	71
4.3 Adoption: Who are the Leaders; How Long Did it Take?	74
4.4 Amount of Discussion Regarding the Change to Form-Based Code	76
4.5 Is Form-Based Code Achieving its Intended Goals?	78

4.6 Effect of Form-Based Code on Time, Cost and Community Interaction	78
4.6.1 Time	81
4.6.2 Cost	82
4.6.3 Community Interaction	83
4.7 Four Outcomes Respondents Expected from Form-Based Code	84
4.8 Are Expectations Met?	87
4.8 Comparison of Planning Directors with All Respondents	88
4.10 Survey Insights	94
CHAPTER 5: PROTOCOL TWO—ADOPTION OF FORM-BASED CODE: CINCINNATI, DENVER AND MIAMI CASE STUDIES	100
5.1 Cincinnati	101
5.1.1 Contextual Factors	104
5.1.2 Adoption Decisions	106
5.1.3 Implementation	112
5.1.4 Outcomes	114
5.2 Denver	118
5.2.1 Contextual Factors	121
5.2.2 Adoption Decisions	125
5.2.3 Implementation	127
5.2.4 Outcomes	128
5.3 Miami	130

5.3.1 Contextual Factors	131
5.3.2 Adoption Decisions	136
5.3.3 Implementation	138
5.3.4 Outcomes	145
5.4 ADOPTION CONCLUSIONS	150
CHAPTER 6: CONCLUSIONS	152
6.1 Overview of Study Results	153
6.1.1 Primary Findings	154
6.2 What Motivates Change?	156
6.2.1 From One Page to 1000	157
6.2.2 The Jury is Out	159
6.3 The Impact of Form-Based Code on Zoning	160
6.3.1 The Two Things People Hate: Density and Sprawl	161
6.3.2 Delegation of Power	162
6.3.3 New Urbanism versus Old Urbanism	163
6.3.4 Sustainability or Walkability	164
6.4 Politics as an Art: Who Motivates Change	165
6.5 The Effect on Practice	167
6.6 Future Research: Cool Counts	170
6.6.1 More Research Needed	171
6.6.2 Zoning Begets Zoning: Policy Implications	171

APPENDIX A: ON LINE SURVEY	173
APPENDIX B: COMMENTS ON SURVEY FROM THE FORM-BASED CODE GROUP	181
APPENDIX C: FORM-BASED CODE LOCATIONS FROM THE CODES STUDY	183
REFERENCES	185

LIST OF TABLES

	Page
Table 1.1 Polyzoides (2008) Ten Key Principles of Form-Based Code	20
Table 1.2 Minimum Components of Form-Based Code	22
Table 1.3 Process for Adoption of Form-Based Code	22
Table 2.1 Table of Key Literature	26
Table 3.1 Method to Address Case Studies	60
Table 3.2 Information Identified Through Case Studies	67
Table 4.1 Named Change Leader	75
Table 4.2 Survey Respondents Comments Describe Community Discussion	77
Table 4.3 Respondents Describe How Form-Based Code is Working	80
Table 4.4 Outcomes Reported Regarding Time, Cost and Amount of Public Process	81
Table 4.5 Respondents Expected Outcome of Change to Form-Based Code	85
Table 4.6 Respondents Comments Regarding Expectations from Change to Form-Based Code	88
Table 5.1 Cincinnati Census Data 2012	105
Table 5.2 Cincinnati Summary of Issues and Results	117
Table 5.3 Denver 2012 Census Data	120
Table 5.4 Denver Summary of Issues and Results	130
Table 5.5 Miami 2012 Census Data	135
Table 5.6 Miami Summary of Issues and Results	149

LIST OF FIGURES

	Page
Figure 2.1 Concentric Development Rings, Von Thunen (1826)	27
Figure 2.2 Patrick Geddes Valley Section 1909	28
Figure 2.3 Christaller's Hexagonal Structure	30
Figure 2.4 Planning Transects	31
Figure 2.5 Ebenezer Howard 1902 Illustration of the “Group of Slumless, Smokeless Cities” Located Around Philadelphia	41
Figure 3.1 Analytical Framework	59
Figure 3.2 Codes Study Screen Shot	63
Figure 3.3 Geographical Locations of Survey Respondents	64
Figure 4.1 Percentage of Respondents Who Self-Identify Their Position	69
Figure 4.2 Zoning Experience of Respondents	69
Figure 4.3 Percentage of Respondents Self-Identified Professions	70
Figure 4.4 Percentage of Respondents With Direct Experience with Form- Based Code	71
Figure 4.5 Percentage of Respondents who Advocated or Resisted Change to Form-Based Code	72
Figure 4.6 Percentage of Respondents’ Length Of Experience with Form- Based Code	72
Figure 4.7 Percentage of the Status of Form-Based Code in Respondents’ Communities	73
Figure 4.8 Leaders of the Change to Form-Based Code	74
Figure 4.9 Respondents Report Length of Time to Enact Form-Based Code	76

Figure 4.10 Percentage of Respondents Opinion when Queried about Amount of Discussion Regarding the Change to Form-Based Code	78
Figure 4.11 Respondents Report How Form-Based Code is Working In Their Community	79
Figure 4.12 Outcome of Time Change Attributed to Adoption of Form-Based Code	82
Figure 4.13 Outcome of Cost Change Attributed to Adoption of Form-Based Code	83
Figure 4.14 Percentage of Responses of Community Interaction Change Attributed to Adoption of Form-Based Code	84
Figure 4.15 Word Map of First Outcome Comments by Respondents	85
Figure 4.16 Zoning Experience Comparison of Planning Directors and All Respondents	89
Figure 4.17 Percentage of Planning Directors Self-Identified Professions Compared to All Respondents	89
Figure 4.18 Comparison of Planning Directors to Total Survey Respondents' Length of Experience with Form-Based Code	90
Figure 4.19 Comparison of Responses Identifying the Leader of the Code Change from Planning Directors and All Respondents	91
Figure 4.20 Comparison of Planning Directors and All Survey Respondents Regarding the Length of Time to Change to Form-Based Code	92
Figure 4.21 Based on Experience is Form-Based Code Working as Envisioned Comparison of Planning Directors and Total Survey Respondents	93
Figure 4.22 Comparison of Time Change by Planning Directors and All Survey Respondents	92
Figure 4.23 Comparison of Cost Change by Planning Directors and All Survey Respondents	93
Figure 4.24 Comparison of Community Interaction by Planning Directors and All Survey Respondents	94

Figure 4.25 Comparison of Planning Directors and All Survey Respondents When Asked if Applications Increased or Decreased With Code Change	95
Figure 4.26 Comparison of Established, Fast Growing and Struggling Communities	98
Figure 5.1 Timeline for Cincinnati Form-Based Code	106
Figure 5.2 Cincinnati Neighborhood Map; Location of Westwood, Madisonville, College Hill and Walnut Hills	109
Figure 5.3 Timeline for Denver Form-Based Code	126
Figure 5.4 Miami 21 Timeline	137
Figure 5.5 Miami 21 Permitting Process Organization	141
Figure 5.6 Zoning Ordinance 11000 Permits From 2007 to 2010	143
Figure 5.7 Warrants Reviewed by Planning Director 2010 to 2013	144
Figure 5.8 Waivers Issued in Miami 2010 to 2013	144
Figure 5.9 Neighborhood Located NW 31st Street Located Across From the Walmart Proposed for the Corner of NE 29th and 31st Streets	147
Figure 5.10 Proposed Walmart Location at 3055 North Miami Avenue	147
Figure 6.1 Academic Articles Published by Year 2006—2014	153
Figure 6.2 Seaside Form-Based Code Guidelines 1992	158

LIST OF ABBREVIATIONS

ACD	Area of Concentrated Development
AIA	American Institute of Architects
APA	American Planning Association
ASPO	American Society of Planning Officials
CATS	Center for Applied Transect Studies
CCC	Colorado Convention Center
CNU	Congress of New Urbanism
CNU-CTX	The Congress of New Urbanism—Central Texas Chapter
CZRB	Chicago Zoning Review Board
DUSPA	Denver Union Station Project Authority
EPCOT	Experimental Prototype of the Community of Tomorrow
DDP	Downtown Denver Partnership
FAR	Floor Area Ratio
FBC	Form-Based Code
FBCI	Form-Based Codes Institute
FTA	Federal Transportation Administration
GIS	Geographic Information System
HUD	Housing and Urban Development
HSL	Highly Suitable Location
LODO	Lower Downtown
LEED	Leadership in Energy and Environmental Design

MNU	Miami Neighborhoods United
MUSP	Major Use Special Permit
PUD	Planned Unit Development
SZEA	Standard State Zoning Enabling Act
TAC	Technical Advisory Corporation
UDO	Urban Development Ordinance
ULI	Urban Land Institute
USPTO	United States Patent and Trademark Office

SUMMARY

Zoning is the “almost universal form of regulating land use” (Birch 2009). Beginning in Germany in the early 20th century, New York City in 1916 adopted the first zoning code to regulate height, bulk and use. The Supreme Court upheld the rights of the Village of Euclid, Ohio, to enforce zoning in the celebrated *Village of Euclid v Ambler Realty* in 1926, and the courts have supported it ever since. By 1928, over 525 local governments had adopted zoning, and ten years later the number had grown to more than 1,200 ordinances. The fact that zoning spread so quickly prior to modern communication methods is indicative of the need and desire on the part of government officials and residents for building and development controls. “Zoning was the heaven-sent nostrum for sick cities, the wonder drug of the planners, the balm sought by lending institutions and house holder alike. City after city worked itself into a state of acute apprehension until it could adopt a zoning ordinance” (Scott 1969, 192).

Zoning is the foundation of city planning. Planners have the power to regulate the use and form of privately owned land—an enormous task. The city’s future development hinges on zoning (Williams 1922). Furthermore, city design has long been recognized as being predicated on power. Legate (1998) stated quite succinctly: “City building has preoccupied kings and cardinals, mayors and burghers for thousands of years. But it was only in the modern period that urban planning became an accepted profession and a well-defined field of study.” Planners possess an inordinate amount of power over process, politics and property, which amazingly some disregard.

This research is structured to answer the following questions: What is the motivation for the change from Euclidean zoning to form-based code? Who are the primary leaders for change? How are communities implementing form-based code? What is the impact of change in time, cost and public process? Two protocols are conducted for this research. Protocol one includes an online survey of planning officials and professionals in communities that have adopted, or are in the process of adopting, form-based code. Protocol two includes studies of three cities where form-based code is currently being implemented: Denver, Miami, and Cincinnati. The focus of the two protocols is organized around four metrics: (1) contextual factors; (2) adoption decisions; (3) implementation; and (4) outcomes.

This study will find that form-based code is important to the cities that have adopted it, but that it is not sweeping the country as zoning itself did 100 years ago. The surveys and interviews will indicate that the adoption of the new code is greatly enhanced by passionate, top-level leadership. Respondents are clear that anticipation of development and improved design are their primary reasons for code change. Interviews with planning leaders in Cincinnati, Denver and Miami will illustrate why each city changed their code is their dissatisfaction with outdated and cumbersome codes.

In and of itself, form-based code will not solve social issues or bring new industry to a city. Expectations among planners surveyed are that once the Great Recession ends, developers will emerge to invest in their communities. While a widespread switch to the new code has not happened as quickly as advocates expect, this research will indicate that practitioners in cities that have adopted form-based code believe that the new code does promote change that encourages objectively better cities.

CHAPTER 1

ZONERS AND FORMERS

Planners preside over zoning, the powerful tool that controls land development in its most authoritative form by using police power to regulate property rights. Zoning is an imperative, yet controversial, aspect of planning practice, often described as fragmented, arbitrary and contentious. The laws are often subject to change with frequent amendments to add, clarify, implement and monitor (Mandelker 2009). Over the last fifteen years, communities have been divesting themselves of their historic Euclidean zoning in favor of the newer concept of form-based code. However, changing an entire zoning code is an immense project that requires a massive investment of motivation, time, perseverance and money. The impact of change on a community can be vast and the economic and political fallout creates its own winners and losers.

Euclidean zoning is the conventional standard of regulating land use that was upheld by the United States Supreme Court in 1926. The Standard State Zoning Enabling Act of 1922 (SZA) encouraged the adoption of zoning throughout the country. Euclidean zoning is also referred to as single-use zoning or flat zoning (Hirt 2012a).¹ It is the most controversial issue that surfaces in the planning profession. Public policy, community engagement, politics, neighborhoods, businesses, economic and physical development, jobs and social justice are all regulated in some part by zoning. Students are amazed by zoning; they are astounded to learn such a powerful tool

¹ Euclidean zoning, <http://www.miami21.org/typesofzoningcodes.asp> and <http://legal-dictionary.thefreedictionary.com/Euclidean+zoning> (accessed March 22, 2014).

exists. Property owners, too, are surprisingly astonished when confronted with the volatility and power of zoning as it impacts their homes and neighborhoods. They rarely give a thought to zoning until it directly affects them—which inevitably it does, if they are involved in a business or own property.

Based primarily on form rather than land use as in Euclidean zoning, form-based code relies on “market economic forces to determine the use of the property not the zoning code” (Cullingworth and Caves 2009, 117). Form-based code emerged from the Congress of New Urbanism (CNU) as the implementation tool that proponents believe will change their communities for the better. CNU was founded in 1993 by a reformation group of architects dedicated to designing sustainable communities. They describe themselves as “the leading organization promoting walkable, mixed-use neighborhood development, sustainable communities and healthier living conditions.”² Proponents are committed to discouraging the suburban sprawl that developed over the last 60 years, while minimizing the spread of auto-oriented and low-density building. CNU places the blame for sprawl primarily on Euclidean zoning and the planning profession (Rangwala 2013). In the introduction to *Form-Based Codes*, Polyzoides (2008, xiv) states, “From the United States comes post-World War II sprawl... fueled by homogeneous production housing tracts, ugly commercial strips and isolated high-rise buildings, and enabled by highway and freeway construction.”

In case this description of American sprawl is not clear, Polyzoides continues: “American growth produced unprecedented congestion, ugliness, impermanence and

² CNU is the recognized organization promoting new urbanism, https://www.cnu.org/who_we_are (accessed September 16, 2013).

petroleum dependence.” References to “sprawl-inducing zoning and subdivision rules create localized effects that, in aggregate, present a significant barrier to compact walkable urban form” illustrate how form-based code is in conflict with conventional zoning (Talen 2013, xv, 188).

John Reps famously voiced the basis of the problems with zoning in his 1964 Pomeroy Memorial Lecture to the American Society of Planning Officials (ASPO):

Zoning is seriously ill and its physicians—the planners—are mainly to blame. We have unnecessarily prolonged the existence of a land use device conceived in another era when the true and frightening complexity of urban life was barely appreciated. We have, through heroic efforts and with massive doses of legislative remedies, managed to preserve what was once a lusty infant not only past the retirement age but well into senility. What is called for is legal euthanasia, a respectful requiem, and a search for a new legislative substitute sturdy enough to survive in a modern urban world. (Reps 1964, 33)

Several types of mixed zoning applications were enacted over the last half century in an attempt to limit sprawl. Planned unit developments (PUDs), subdivision regulations, performance zoning, conservation development and overlay districts are only a few. Fifty years after Reps requiem, community planners were looking for a new vision of development, just as CNU and their prescribed form-based code emerged.

Proponents describe this new code as the path to avoiding arguments with the neighbors, offering the developer certainty in rezoning and cost savings, providing confidence with development rights and ultimately encouraging more and faster development (Parolek, Parolek, and Crawford 2008, Diaz 2013). Opponents believe that form-based code does not address the market realities of development and fault it as too complicated, traditional, suburban-oriented and formulaic (Rangwala 2013). There is no research to either support or contest the claims of form-based code advocates.

Does changing code provide the antitheses of Euclidean zoning, or are the claims of form-based code advocates correct and their code the panacea for everything wrong with planning and development? This is a sweeping question and one that is asked in hundreds of planning offices by planners, urban designers, politicians and their communities. Mandelker (2009) defines Euclidean zoning, referred to as conventional zoning, as the tool that regulates land enacted by local government with the power authorized by the state. Land is regulated on a zoning map that identifies specific land use along with an ordinance that specifies development regulations. Each town, city, village and county has their specific zoning code. Form-based code is the more recent code that shapes physical development as a priority rather than the use of land. Conventional zoning and form-based code are described in specific terms later in this chapter.

1.1 Purpose of the Study

Assertions that form-based code is wholly responsible for re-energizing downtowns, redeveloping cities and promoting successful economic development are widely debated. The reality of what form-based code actually accomplishes is hard to distinguish from promises that often oversell the product (Rangwala 2013). This research will determine if planners are as enamored with form-based code as proponents suggest and will identify the state of practice regarding code change throughout the country. Important to this discussion is how the new code is affecting zoning in American cities, as it does appear to be gaining momentum. New criteria, including online surveys of planners and case studies of cities where form-based code is adopted, are included to study this phenomena. The (form-based) Codes Study website states

“there are 480 codes that meet criteria established by the Form-Based Codes Institute (FBCI), as well as an additional 14 form-based guidelines, 279 of these are adopted, with others in progress. Even though form-based codes are 30 years old, 84 percent have been adopted since 2003” (Borys and Talen 2013).³

The April 2013 American Planning Association (APA) annual meeting offered a highly attended short-course webinar on form-based code that included five panel discussions on the subject of why cities should change their code. The panels were presented as a three-day forum to discuss the “connection (and disconnection) between regulations imposed by zoning and the resulting pattern and form of cities.”⁴ The panels, packed with standing-room-only attendees, included local government and private practitioners with direct experience with the code changes. Critics were not included in the formal program, but lined up for the question portion of the presentations. Planners supporting Euclidean zoning are labeled “zoners,” and “formers” are those in support of form-based code. The “zoners” in the audience directed questions to the panelists asking them for proof that the positive assertions were true, because without research their comments were based entirely on opinion. The discussions ended with the audience cautious and uncertain, and with battle lines drawn.

City and regional planning officials throughout the country are asking the same questions. What is the motivation for a community to decide to change their Euclidean

³ The 480 communities that meet the criteria are a small number (0.539 percent) using the U.S. Census Bureau count of a total of 89,000 local governments, <https://www.census.gov/newsroom/releases/archives/governments/cb12-161.html> (accessed March 22, 2014).

⁴ The panels were entitled “Zoning to Shape Urban Form,” held at the annual meeting of the American Planning Association. Chicago, 2013.

zoning to form-based code? Do they want to change their priorities, policies and why? Who will lead the effort? Will the change result in better planning and development for the region, city or neighborhood? More importantly, is this change worth the time, cost and disruption to their community?

1.2 Problem Statement

This investigation provides survey and interview data detailing the cause and effects from practitioners who are working on implementing form-based code. To date, the discussion between “formers” and “zoners” is on a comment or case basis, without providing actual facts. As the first documentation of the adoption and implementation by planners working with form-based code in communities, the result of this research is a leading-edge discussion that is expected to be debated further. These data are included in Chapters 4 and 5 and are expected to be expanded further in subsequent research.

This dissertation is an investigation of the theory and practice in the exploration of Euclidean zoning vs. form-based code. **The primary question is why and how communities change from conventional Euclidean zoning to form-based code. This research examines the state of practice and the impact of form-based code on zoning. Issues critical to an examination of the theory and practice aspects of this investigation includes key questions: What motivates change? What difference does it make? Who are the primary motivators for change? What is the comparative analysis and the basis for change and the impact of form-based code?**

This research includes the historical evolution of form-based code and the actions that led to this point of choice to determine the effect on zoning. The research method includes an online survey of planners who are implementing form-based code.

The benefits and results of this change are identified, and accompanied by an examination of the adoption and implementation of the code in three cities: Cincinnati, Denver and Miami.

Why would planners want to dismantle the original rules that made cities habitable in the early 20th century? How did this perceived need for a change in zoning occur? New Urbanists believe that over time the rules that frame Euclidean zoning have emerged as having negative effects on urban form and function. In their words, “times have changed” (Talen 2012). Throughout the past century, Euclidean zoning was considered the savior of cities, with goals to: (1) regulate the common-law method of land use; (2) recognize the influence of the emerging planning profession; (3) reproduce New York City’s successfully implemented zoning act and the model act proposed by the U.S. Department of Commerce; and (4) acquiesce to the social experts of the early 20th century Progressive era of politics (Wolf 2008).

Birch (2009) describes zoning as the “almost universal form of regulating land use.” Beginning in Germany in the early 20th century, zoning was first adopted by New York City in 1916. The Supreme Court upheld the rights of the Village of Euclid, Ohio, to enforce zoning in the celebrated *Village of Euclid v Ambler Realty* in 1926, and the courts have supported it ever since.⁵ By 1928, over 525 local governments had adopted zoning, and ten years later the number had grown to more than 1,200 ordinances. The fact that zoning could spread so quickly prior to modern communication methods is indicative of the need and desire on the part of government officials and residents for

⁵ *Village of Euclid v Ambler Realty* (1926), <http://www.casebriefs.com/blog/law/property/property-law-keyed-to-dukeminier/legislative-land-use-controls-the-law-of-zoning/village-of-euclid-v-amber-realty-co/> (accessed March 25, 2014).

building and development controls. “Zoning was the heaven-sent nostrum for sick cities, the wonder drug of the planners, the balm sought by lending institutions and house holder alike. City after city worked itself into a state of acute apprehension until it could adopt a zoning ordinance” (Scott 1969, 192).

Throughout the last century, zoning and planning practice devolved: from an ideal founded on the goal of ensuring health and safety by protecting the population from industrial uses and pollution, to a derided example of government inefficiency. According to critics, zoning did not achieve the goal to make cities better, but rather separated them into a bureaucracy of development islands. Ben-Joseph summarized the now-familiar discussion of why planning failed:

The planning profession has generally been reluctant to champion physical design, largely because of an ideological commitment to social-science based disciplines as the foundation for urban planning education and practice. This has resulted in the marginalization of urban design and physical planning to the point that it all but disappeared from urban planning curricula. Physical planning tasks have been turned over to others following the formulas of local codes and regulations. This has not only created a one-dimensional approach to planning, but it has also rendered planning practices inadequately prepared to deal with current environmental and development trends. (Ben-Joseph 2005, 115)

Inadequate, one-dimensional and *marginalized* are tough criticism for zoning codes and the planning profession. Architects and urban designers have long been agitating to take back the design of cities with a form-based approach. New York City has been the leader in shaping form and development. Barnett (1974) described the cutting-edge design regulations implemented since the 1960s. New York promoted legitimized design elements by implementing incentives in its groundbreaking 1961 zoning revision, including: (1) contextual zoning regulating height, placement and scale of buildings to fit into existing neighborhoods; (2) bonus incentives rewarding floor area

for building plaza spaces, referred to as the *tower in the park* theory; (3) density bonuses for building streetscape and open space; and (4) special use districts that identify land use and design districts, such as the more recent 1982 Times Square special zoning district and the 2014 Special Midtown District (Barnett 1974).⁶

The sprawl-versus-urbanism-versus-sustainable-environments debate added ecology and sustainability to the mix, and the discourse broadened to the 2011 *landscape urbanism* discussion that is ongoing.⁷ Frederick Law Olmsted and John Nolen were noted landscape architects who are sometimes credited with the origins of zoning and form-based code.⁸ Ben-Joseph (2005) describes form-based code as the proposed solution to sustainability, along with other fixes to current zoning laws, by providing place-based solutions along with a plan to combine design and planning.

Many designers and public officials enthusiastically embrace, endorse and advocate for form-based code. As Elizabeth Plater-Zyberk, a founder of the architectural firm Duany Plater-Zyberk (DPZ) and past dean of the University of Miami School of Architecture, describes in the introduction to *Form-Based Codes*: “This is a book with a point of view. Its intention is to promote the form-based code, a new tool for the making and remaking of the built environment” (Parolek, Parolek, and Crawford 2008, 9). Published in 2008, the form-based code book is authored by CNU architects and planners.

⁶ The Midtown District is described at <http://www.nyc.gov/html/dcp/pdf/zone/art08c01.pdf> (accessed August 16, 2014).

⁷ Landscape urbanism is discussed in *Street fight: Landscape Urbanism versus New Urbanism*, <http://bettercities.net/article/street-fight-landscape-urbanism-versus-new-urbanism-14855> (accessed March 25, 2014).

⁸ Olmsted and Nolen are discussed in more detail in Chapter 5.

The origins of form-based code are important to understand, and are found with the formation of CNU. The New Urbanism movement began with the design of Seaside, a vacation community in the Florida Gulf Coast. Seaside, designed by DPZ, opened in 1981 as an unincorporated second-home community for vacationers, primarily from the southeast. Described on its website as a community that is simple, gracious and elegant, the resort is further envisioned as a return to Charleston Antebellum and revival architecture.⁹ Neighborhood and community references are prevalent throughout the website's imagery. Initially, homes sold for a few hundred thousand dollars, with current 2014 prices for the more modest homes at just under \$2 million.¹⁰ Perhaps inspired by Utopian imagery of the seaside town lifestyle of Spring Lake, New Jersey (the 1880 Victorian idyllic community that was among those Disney emulated for the design of hotels), the community appealed to second-home buyers. Its gridded streets and variety of traditional housing types were reminiscent of mid-last-century development of cities, and offered a return to a quiet, tranquil small-town atmosphere.

CNU subsequently established themselves as the group that promoted walkable communities built in the style of the City Beautiful movement of the late 19th and early 20th centuries. The CNU website describes the group's founding as:

A group of enthusiastic architects looking to codify the thought behind their previous work in creating long-lasting and better-performing neighborhoods. Working against the conventional, predominant sprawl-oriented dogma of the post-WWII period, the group had worked for years to create buildings, neighborhoods, and regions that provide a high quality of life for all residents, while respecting the natural environment. Founders Peter Calthorpe, Andrés Duany, Elizabeth Moule, Elizabeth Plater-Zyberk, Stefanos Polyzoides and Dan Solomon came together to form the organization, and were assisted in the

⁹ Architecture at Seaside, FL, <http://www.seasidefl.com/history/architecture/> (accessed November 15, 2013).

¹⁰ Real estate at Seaside, FL, <http://www.seasidefl.com/real-estate/> (accessed November 15, 2013).

coordination of their effort by Peter Katz, who became the first Executive Director of CNU.¹¹

SmartCode©, a transect-based form-based code, was released in 2003 by CNU as the model code for new urbanism communities. The Center for Applied Transect Studies (CATS) defines transect as the “cut or path through part of the environment showing a range of different habitats.”¹² CATS is the group responsible for writing SmartCode, a form-based code that can be licensed and customized, along with research and publicity for related transect development principles. The list of principles that are included in their proposed code include goals for transportation, food production, health and safety, climatic response, waste products, and the repair of sprawl and unsustainable infrastructure. The development of these neo-traditional town plans, with gridded streets and specified building form, are intended to be organized around the principles of New Urbanism and the SmartCode.

By reworking land use regulation and public policy while disavowing Euclidean zoning, critics or “zoners” say New Urbanists believe they can turn back the clock and return to what they envision as the charming cities of the past.¹³ These communities, built and managed by one owner, are in actuality planned unit developments (PUD) under the developers control until management is conveyed to the neighborhood governing body upon build out.

Other New Urbanist communities followed Seaside. The largest is Celebration, developed by the Disney Development Company and located south of Orlando, Florida,

¹¹ History of CNU, <https://www.cnu.org/history> (accessed December 15, 2013).

¹² CATS, <http://www.transect.org/about.html> (accessed April 8, 2013).

¹³ Seaside was the setting for the *Truman Show*, a 1988 satirical film about a return to quaint small town values.

which opened in 1996.¹⁴ Designed as the focal point of the Experimental Prototype of the Community of Tomorrow (EPCOT), the site includes 3,000 homes, a town center and office buildings. The town of Celebration has won many awards for design.¹⁵ These New Urbanist communities were designed to emphasize: (1) walkability; (2) connectivity; (3) mixed-use and diversity; (4) mixed-use housing; (5) quality architecture and urban design; (6) traditional neighborhood structure; (7) increased density; (8) smart transportation; (9) sustainability; and, (10) quality of life.¹⁶

1.3 Vignettes from Practice

This research is focused on whom and what motivates the community and elected officials to change their priorities and policies from historically entrenched Euclidean zoning to form-based code, and impacts associated with change. Three short vignettes begin this discussion: Dorchester County, South Carolina; Alexandria, Virginia; and Austin, Texas.

1.3.1 Dorchester County, South Carolina

The issue is how changing the zoning code affects a community. A recent example is Dorchester County, South Carolina, where local government officials questioned what would happen if the county changed from traditional Euclidean zoning to form-based code. The County's small planning staff had become enthralled with a consultant presentation advocating form-based code as the best way to mix land uses in the commercial centers of the county, to entice development and to manage their

¹⁴ Cooper Robertson Architects and Robert A.M. Stern Associates are credited with master planning Celebration. AECOM (formerly EDAW) is credited as the planner and landscape architect.

¹⁵ Urban Land Institute awarded Celebration the new town planning award in 2001.

¹⁶ New Urbanist communities are described as the most important planning aspect of the 20th century, the list of attributes is from the New Urbanism. Diversity refers to ages, income levels, cultures, and races. <http://www.newurbanism.org/> (accessed April 8, 2013).

anticipated growth. It was 2007, before the Great Recession and, like many locations, Dorchester was looking for any advantage to make their county competitive, and ultimately more attractive, to developers and residents.

Dorchester County is located 20 miles northwest of the historic southern coastal seaport town of Charleston. The county is situated along Interstate 26, the main route to Columbia, the state capital. According to U.S. Census figures, Dorchester's population increased 67 percent, from 96,000 reported in 2000 to 143,000 in 2010.¹⁷ Summerville, the largest city in the county, was founded in 1785 as the supply town for vast plantations in the area.¹⁸ South Carolina's population increase largely consists of baby-boomer retirees who settle in mid-south locations with four distinct seasons rather than in Florida (Strauss 2012). Charleston, population 350,000, is a popular destination for tourists and was named the 2012 Best City in the World by *Conde Nast Traveler* (Yancey 2012). Retirees love Charleston.

Dorchester's interest in form-based code was fueled by the pending 70,000-acre East Edisto land development plan, a mixed-use development targeting retirees by the giant timber corporation MeadWestvaco.¹⁹ Local public officials anticipated that the East Edisto development would overwhelm sprawling suburban Charleston and Dorchester County. Charleston's Mayor Riley was involved in the land-use discussion as the *de facto* senior advisor to the local governments. Many public meetings were conducted working with the community, who loudly voiced their hatred of density and

¹⁷ U.S. Census Bureau, State and County quick facts, Dorchester County, <http://quickfacts.census.gov/qfd/states/45/45035.html> (accessed September 15, 2013).

¹⁸ Summerville, South Carolina Historic Facts. (2012), <http://www.visitsummerville.com/html/historicfacts.html> (accessed September 15, 2013).

¹⁹ AECOM (formerly EDAW) was the prime land design consultant.

sprawl (Faga 2008). Dorchester's planners were having a hard time determining how much effort, public involvement, cost and consequence would result from changing their zoning code. While proponents of form-based code were encouraging the change, they could not find information that included hard facts and figures. Anticipating consulting contracts and large fees, several consultants called on the elected officials to exalt this newest and best way to rezone.

Dorchester County had two planners and one engineer on staff. Not much had been published describing implementing form-based code aside from a few articles by New Urbanist advocates. There was a lack of research available that would help to determine time, impact or costs. The Great Recession gave participants pause to review Dorchester's impending county wide zoning change. In 2012, after five years of negotiation, MeadwestVaco's East Edisto development team lobbied for and received their zoning change as a form-based overlay district for 39,000 acres. Dorchester is currently working to change their entire county zoning code and still looking for research to help determine the costs and impact on the community. Almost ten years later, no such research exists.

This scenario has played out across the country hundreds of times, as public officials look for the newest, best mechanism to make their locations attractive for development and as developers look to build marketable projects. Sometimes form-based code adoption is embraced by experts, as with Andres Duany and Elizabeth Plater-Zyberk and Miami 21, their new hybrid citywide code.²⁰ Many times, the consultants are planners and engineers in small towns and counties. The community

²⁰ Duany and Plater-Zyberk are the founders of DPZ, the Congress of New Urbanism and form-based code. DPZ is headquartered in Miami, <http://www.dpz.com/> (accessed June 12, 2014).

planners ask: Is form-based code a gamble? Will it result in superior development? Offer a better city? Or is it simply a new language by which to dictate design? Are the local planners and architects convinced? Are they advocates or opponents for change?

1.3.2 Alexandria, Virginia

Alexandria experienced the results of a zoning code that included strict design guidelines. The city was the focus of historic preservation in the 1970s. Dedicated local preservation advocates lobbied for strict zoning of the downtown, with a heavy-handed design overlay that protected historic structures and restricted the architectural form and design of new construction. The code mandated red-brick buildings along King Street, the main shopping venue. When the code specified buildings were to be five-story red brick with six-over-six windows, the result was a line of monotonous five-story, red-brick buildings, which included the new federal courthouse on King Street. When city officials saw the code-dictated results, it was immediately modified to stop the monotony. King Street has since evolved into a busy shopping area with a variety of design styles. The design limitation of working with a tight design overlay legislating a strict form became a valuable learning experience for historic preservationists of what not to do in a small city.

Was it the zoning, design guidelines, or the impact of an untested design code that derailed the King Street buildings? Streets, architecture, image, and building envelopes coupled with the elements of nature are the building blocks of Alexandria's successful physical urban design. Lynch (1981) became the pattern for Alexandria design guidelines. The smaller city emulated Boston, hiring Benjamin Thompson's office to assist with urban design. Thompson introduced Lynch's designated paths,

landmarks, nodes, edges, and districts as the design elements that build city form. The city's urban designers reworked the King Street design guidelines as a district including edges, paths and landmarks. At the same time, the King Street area zoning code was modified to allow a variety of uses. Additionally, the Potomac River master plan was adjusted to include elements for the redevelopment of the historic Torpedo Factory, including parks and paths. The American Planning Association (APA) named King Street as one of their Top Ten Great Streets in 2011, proving that time and effort by the city and business association over 35 years can produce a positive result.²¹

1.3.3 Imagine Austin, Texas

At a March 2013 public meeting sponsored by Imagine Austin, four speakers discussed their form-based code to allow the Austin community to hear first-hand the issues involved in changing their code.²² Veletta Forsythe, Dallas comprehensive plan committee chair and former city council member, explained that the Dallas code “is less about use, and more about what it looks like.” Along with the Dallas panel member, planners from Michigan, Denver and Raleigh participated in a primarily proactive discussion of form-based code. Noise, bicycles, transit, parks and sustainability issues as they applied to city codes were discussed by the panel.

A specific question to the panel asked for results of the code change in their cities. Mitchell Silver, Raleigh, North Carolina chief planning director and recent past president of the APA, answered: “The jury is out, anticipation is high, and people want

²¹ APA's Top Ten Great Streets 2011, <http://urbanland.uli.org/industry-sectors/apa-s-top-10-great-streets-2011/> (accessed August 28, 2014)

²² ImagineAustin was prompted by the adoption of the comprehensive plan in 2012 which called for an update to the development code. The prime consultant was WRT Philadelphia, <http://www.austintexas.gov/imagineaustin> (accessed November 15, 2013).

change quicker with less public meetings.”²³ Tina Axelrad, Denver’s principal planner, responded that: “After two and a half years and a sluggish economy, we believe we’ve built a solid chassis and will later build in more safety valves,” and also mentioned that it was too soon for Denver to gauge the outcome (Silver et al. 2013). The conclusion of the panel was that form-based code was the new direction that people like it and, although results to date in other cities are minimal, Austin should proceed to rework their code. After the meeting, several local practitioners mused how communities could consider such substantial change with minimal factual information.

CNU-CTX (The Congress of New Urbanism—Central Texas Chapter) actively advocated for the approval of Austin’s form-based code. The CNU-CTX website states that they “have been very involved since the inception of the planning process, encouraging the inclusion of New Urbanist principles in the plan and highlighting Imagine Austin's alignment with the Charter for the New Urbanism.”²⁴ CNU-CTX provided two letters of support, the first to Austin mayor Lee Leffingwell and the second to the Imagine Austin Citizen Advisory Committee. The letters advocate for a “compact connected city” and request that the language describing priority actions be made stronger to support New Urbanist principles offering a revision with edited versions of the appointed committee’s stated actions for design and transportation. The CNU-CTX letter recommends the advisory committee “take one more fine-grained pass at

²³ Mitchell Silver, FAICP, is Commissioner of Parks, New York City, http://www.nytimes.com/2014/05/13/nyregion/new-parks-chief-brings-a-city-planners-vision.html?_r=0 (accessed June 23, 2014).

²⁴ CNU-CTX Supports Imagine Austin, <http://www.centraltexascnu.org/cnu-ctx-supports-imagine-austin> (accessed August 28, 2014).

embedding the ‘compact connected city’ into the language of the plan in every section.”²⁵

1.4 Definition and Process for Form-Based Code

The definition of form-based code is not always clear. Obviously, it has a lot to do with physical arrangement, but the overall direction as to how extensively a structure is regulated can vary based on the land use, the transect or section of development, and the regulating plan. Like conventional zoning, it is a locally based decision. A designer cannot begin from scratch to identify form in a developed city, whereas in a new suburban development this can occur. Form-based code in the city is prescribed infill with an emphasis on predictability. Definitions include:

- Form Based Code Institute (FBCI)
“Form-based codes foster predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle for the code. They are regulations, not mere guidelines, adopted into city or county law. Form-based codes offer a powerful alternative to conventional zoning.”²⁶
- Wikipedia
“A form-based code (FORM-BASED CODE) is a means of regulating development to achieve a specific urban form.”²⁷
- City of Rockville, Maryland
“Form Based Zoning: A method of land use regulation characterized by 1) emphasis on form regulations (building size, location, appearance) and 2) prescriptive rules (what a community does want to see built). Form based zoning focuses on established bulk regulations to solve the Euclidian “problem” of use separation. Form codes are designed to provide more flexibility than conventional codes to promote development in largely built

²⁵ Letter from CNU-CTX, http://centraltexas.cnu.org/sites/default/files/CNU_IACP_Letter_11_29_2011.pdf (accessed August 28, 2014).

²⁶ Form-based Codes, <http://www.formbasedcodes.org/what-are-form-based-codes> (accessed November 22, 2013).

²⁷ Wikipedia, http://en.wikipedia.org/wiki/Form-based_code (accessed November 22, 2013).

out communities. These codes work well in established communities because they effectively define and codify a neighborhood's existing characteristics or they can implement new building types when a radical change is desired.”²⁸

- Form Based Codes in New Jersey, Issues and Opportunities

“Form-based zoning, while still regulating uses, is more focused on regulating community form, i.e. the shape of the built outcome. And this is accomplished by regulating building types and their relationships to streets and other public spaces.”²⁹

- Miami 21

“Form-based codes place an emphasis on the relationship between the street and buildings, pedestrian and vehicles, public and private spaces, and the relationship between multiple buildings, a block, a neighborhood and transitions in scale.”³⁰

- *ARCHITECT Magazine*

“Form-based codes are organized around the physical form that a development should take.” (Berg 2010)

- *Form-Based Codes*

“A method of regulating development to achieve a specific urban form. Form-Based Codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use through city or county regulations.” (Parolek, Parolek, and Crawford 2008, 4)

- *City Rules: How Regulations Shape City Form*

“A three dimensional vision of desired urban pattern and form in a transparent predictable way—an approach that doesn’t hide behind arcane text that no one can understand or that results in form and patterns that no one particularly wants.” (Talen 2012, 186)

- APA

“Form-based focused on how to create predictable development patterns and how to make permitted buildings “fit” better with their neighbors and with a community’s plan for how an area should develop.” (Elliott, Goebel, and Meadows 2012, 4)

²⁸ Rockville, MD, (<http://www.rockvillemd.gov/zoning/glossary.htm>) (accessed November 22, 2013).

²⁹ New Jersey, <http://nj.gov/state/planning/docs/formbasedcodes.pdf> (accessed November 22, 2013).

³⁰ Miami 21, http://www.miami21.org/zoning_code.asp (accessed November 22, 2013).

1.4.1 Ten Key Principles

The universe of form-based code is detailed and often complicated, depending on the location and the practice. Just as the definition varies, application is variously interpreted: form-based code can be a hybrid, applied in total, or prescribed for a section or neighborhood. As presented in Chapter 5, the three case studies for the cities of Cincinnati, Miami and Denver, adoption and implementation varies because form-based code seeks to be specific to the locality. Polyzoides (2008) describes “significant variations in the practice” concurrent with an “emerging consensus on a common approach,” and lists his ten key principles for guiding the development and adoption of the code as reproduced in Table 1.

Table 1.1 Polyzoides (2008) Ten Key Principles of Form-Based Code

- | |
|--|
| <ol style="list-style-type: none">(1) Vision: centered, providing a common vision from a master plan.(2) Purposeful: priority driven and focused on areas prone to change.(3) Place-based: calibrated to specific locations.(4) Regionally diverse: commitment to difference and fitted to climate, resources and culture.(5) Consequential: economic development engine.(6) Precise: typological in nature.(7) Integrated, coordinates infrastructure, thoroughfares, building, space and landscape: into a single project.(8) Binding: obligatory standards, not optional guidelines.(9) Comprehensible: simply presented and clear to people without lawyer interpretation.(10) Adjustable: recalibrated with the economy. |
|--|

Source: Polyzoides introduction in Parolek, Parolek, and Crawford, 2008, xvii-xviii.

What makes the ten principles (Table 1) so different and more desirable than conventional zoning? Most of the principles are directly attributable to zoning. Principles (1) vision, (2) purposeful, (3) place based, (4) regionally diverse, (5) consequential, (8) binding, (9) comprehensive and (10) adjustable are included in conventional zoning. Numbers (6) precise and (7) integrated might be construed as different. In the case of (6) precise and typological, there are design guidelines and pattern books as described in Chapters 2 and 6 that are used with conventional zoning. Number (7) integrated is equivalent to overlay districts and plans that include a specific location designated mix of design and uses throughout a single project.

So how is form-based code defined? How does it differ from conventional zoning? A clear definition is difficult to determine by either the “zoners” or the “formers.” For the purposes of this dissertation, the definition used is from Parolek (2008): **“Form-based code is a method of regulating development to achieve a specific urban form.”** In short, “formers” assert that this process includes determining building form and use involving a prescribed method specific to the locality. The process always includes public meetings, 3D modeling, the identification of transects, and design of a regulating plan. Each is an element of the overall formula to determine the means of governing the built environment. Form-based code always shapes the physical form of development rather than the land use (Hack et al. 2009, Parolek, Parolek, and Crawford 2008, Talen 2012). “Zoners,” conversely, say it is merely a more “design guideline and pattern book” attempt at zoning. A detailed description of the elements and process of determining form-based code is included in Chapter 2.

1.4.2 Components and Process

Form-based code architects have established the minimum components of the development of building a form-based code as listed in Table 1.2. Additionally, there is a prescribed process for adoption of form-based code, shown in Table 1.3.

Table 1.2 Minimum Components of Form-Based Code

- | |
|--|
| <ol style="list-style-type: none">(1) A regulating plan—map specific to the area specifying transects.(2) Public space standards—details for streets, walks, landscape.(3) Building form standards—regulations for the architectural design.(4) Administration—information for permitting.(5) Glossary of terms.(6) Block standards—walkable streets and blocks.(7) Building type standards—form and function of buildings.(8) Architectural and landscape standards—regulations of character and quality.(9) Green building standards—low carbon footprint buildings. |
|--|

Source: Parolek, Parolek, and Crawford, 2008, 15-16

Table 1.3 Process for Adoption of Form-Based Code

- | |
|--|
| <ol style="list-style-type: none">(1) Discovery(2) Engage in public visioning(3) Establish a regulatory plan(4) Define urban standards(5) Develop architectural standards(6) Test the code(7) Include in the agency's regulatory framework |
|--|

Source: Rangwala 2012.

Additional elements may be included with form-based code, along with the process for formulating and administering the code are included in the *Form-Based Code* guide book (Parolek, Parolek, and Crawford 2008). The guide book includes a section regarding specifically formatting the website for the new form-based code, which identifies the proper design and content. The detailed layout of the printed code is specified including colors and margins, along with header and footer elements. Typography is also specifically detailed including the typeface (serif). The layout of the pages and the instruction “to create an effective and useable” website, and printed code is stated clearly (186).

CHAPTER 2

THE ORIGINS OF FORM-BASED CODE

Form-based code is not a 21st- or even a 20th-century concept, but one that has evolved from earlier centuries. It is based on a long history of city plans; building design, form, regulating plan, transect and associations can be drawn to central place and regional theory as listed in Figure 2.1. Talen describes the foundations of form-based code as “reaching back at least 3,000 years, and much of what current code reformers are trying to do when they regulate urban dimensions like street width, building height, and frontage connects to that history” (Talen 2009, 158).

City design has long been recognized as predicated on power. Legate (1998) puts it quite succinctly: “City building has preoccupied kings and cardinals, mayors and burghers for thousands of years. But it was only in the modern period that urban planning became an accepted profession and a well-defined field of study.” Numerous designers and theorists established the earliest roots of form-based code, several of whom are mentioned throughout this literature review. Central place, regional planning, growth machines, and the ideal city are all theories that became foundational, and are discussed briefly below (Birch 2009, 60).

Central place theory is the basis of the elements of form based code. The connection is apparent, but has not been widely acknowledged by current theorists or practitioners who champion planning transects. Talen (2012, 2009) recognized the history of zoning and planning in her journal article “Design by the Rules: The

Historical Underpinnings of Form-Based Codes” and subsequent book *City Rules: How Regulations Affect Urban Form*.

A review of the origin of commerce and the economy of scale that is classic central place theory is relevant to zoning as it illustrates how cities evolved over the last two centuries. Urban growth has driven and intensified issues with traditional Euclidean zoning and resulting sprawl development. This chapter includes short discussions on growth machines, regional impact, and the ideal city as the theories that encouraged and negatively impacted zoning. Euclidean zoning and its add-on elements, which were the precursors to the development of form-based code, are also included. Finally, this review ends with an overview of recent form-based code literature, including development and the elements that the new code promotes.

2.1 Foundation of the Transect in Central Place Theory

Central place theory is the basis of the transect in form-based code. Transects are cross sections used by over a century of geographers. Merriam-Webster defines transect as “to cut transversely” when the term was first used in 1905.³¹ Losch, Christaller, von Thunen and Geddes, along with Clay and McHarg, are not often credited with creation of the elements of transects by New Urbanist planners, although their work certainly corresponds. In Parolek’s *Form-Based Codes*, transect is described as “a means for considering and organizing the human habitat in a continuum of intensity that ranges from the most rural condition to the most urban” (2008, 18). Further, the transect origin is described as “a concept in the biological and environmental analysis fields” and

³¹ Transect defined by Merriam-Webster, <http://www.merriam-webster.com/dictionary/transect> (accessed August 31, 2014).

Table 2.1 Table of Key Literature

	CENTRAL PLACE THEORY	The IDEAL CITY	ZONING	GROWTH MACHINES and AGGLOMERATION	REGIONAL IMPACT	POWER and PRACTICE	SUSTAINABILITY	FORM BASED CODE/ TRANSECT
1850	von Thunen(1826)	Hausmann (1855) Burnham (1893) Howard (1898, 1902)						
1900	Christaller (1933)	Hessell (1922) Mumford (1938)	Williams (1922)	Ohlin (1933) Hoover (1937)	Geddes (1909)			
1950	Losch (1954)	Jacobs (1961) de Certeau (1980) Whyte (1980) Foucault (1984) Kostof (1991)	Coleman (1953) Reps (1964) Scott (1969) Clawson (1971) Barnett (1974) Jacobs, A (1980) Boyer (1983) Willis (1986)	Molotch (1976) Logan and Molotch (1987)	Clay (1980) Cronon (1991) Bolton (1992) Krugman (1993, 1999)	Friedmann (2012) Legates and Stout (1998) Forrester (1999)	Lynch (1984) McHarg (1992) Thompson and Steiner (1997)	
2000		Gehl (2010) Rybaczynski (2010)	Birch (2001) Ben-Joseph (2005) Sitkowski (2007) Hirt (2007) Inniss (2007) Wolf (2008) Cullingworth and Caves (2009, 2014) Qian (2011)		Calthorpe and Fulton (2001) Ross (2009) Christopherson (2010) Glaeser (2011)	Beauregard (2012)	Norton (2004) Farr (2008) Palazzo and Steiner (2012) Duany and Talen (2013)	Duany, Plater-Zyberk and Speck (2000) Langdon (2006) Parolek, Parolek and Crawford (2008) Talen (2009, 2012, 2013) Elliot, Goebel and Meadows (2012) Leigh and Hoelzel (2012) Diaz (2013) Garnett (2013) Rangwala (2013)

as “first described and adapted for the purposes of Form-Based Coding by Duany Plater-Zyberk & Company (DPZ)” (Parolek, Parolek, and Crawford 2008,18).

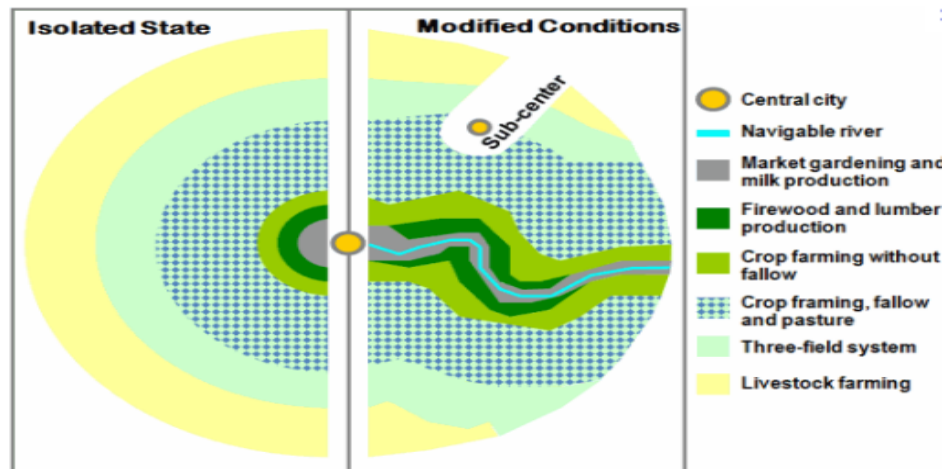


Figure 2.1 Concentric Development Rings, VonThunen (1826)

Source: http://www.lewishistoricalsociety.com/wiki/tiki-read_article.php?articleId=12
(accessed June 21, 2014)

Concentric development rings, as depicted in Figure 2.1, illustrate von Thunen’s (1826) depiction of how the escalation of agricultural costs increased within a determined location or distance to the central place. This appears to be the foundation of the plan for transect design, both by explanation and graphical illustration (vonThunen 1826). Transportation costs were a foundation of location theory and consequently influenced city form. Throughout the 20th century, land use continued to focus on the connection of goods to the people who need them, and people to the goods and services they want.

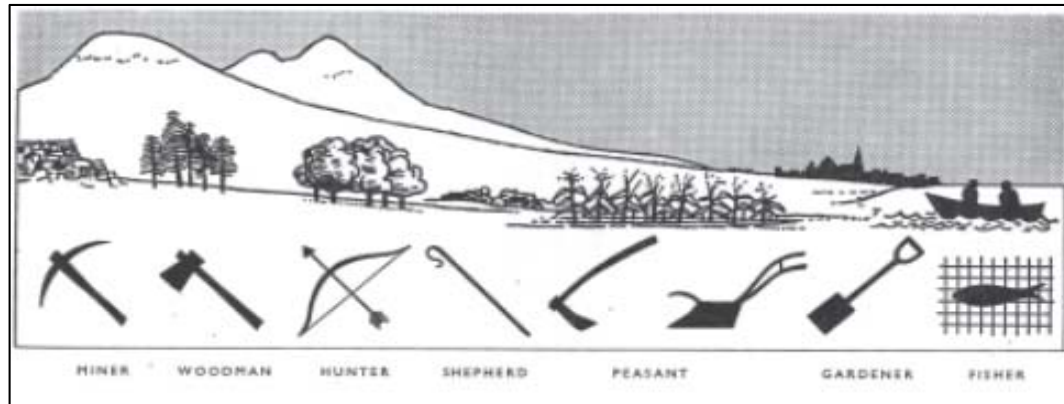


Figure 2.2 Patrick Geddes Valley Section 1909

Source: Clay, G. (1980)

Influenced by Mumford (1938), Howard and his colleague Geddes, used the central city to advocate for density and to vilify sprawl at the turn of the 20th century — a full hundred years before it became fashionable. Howard designed the Garden City, and Geddes countered by regulating urban sprawl, labeling it “conurbation” and illustrating it as a cross-section of the regional system described in plans by von Thunen, Christaller and Losch. Geddes identified the landscape as used by the workers illustrated in Figure 2.2, which depicts a cross section of the valley (Clay 1980). Geddes’ section illustrates the low-ground, low-density area that he labels *fisher, gardener and peasant* evolving into the higher ground *shepherd, hunter, woodman and miner*. Similarly, Duany identifies transects from T1 to T3 as *natural, rural, sub-urban* zones and the transition to higher density, T4 to SD, as *general urban, urban center, urban core and special district zones* (Figure 2.4).

In his attempt to organize German land conquests before and during World War II, Christaller (1933) expanded von Thunen’s ideas with a central place theory that included imposed structure (Franzman 2010). Christaller’s theory revolved around

threshold and range, where threshold included the minimum market to bring a good to sell, and range was the maximum distance customers would go to obtain the good or service. His structure included an ideal economy that he envisioned as circles of development around a central place overlain with a triangular lattice, as illustrated in Figure 2.3. This created an efficient route for travel between settlements that resulted in a hexagonal pattern. Christaller's theory was static in that it required: (1) an isotropic (all flat) surface; (2) an evenly distributed population; (3) evenly distributed resources; and (4) similar purchasing power for all consumers (Christaller 1933).

Losch finessed Christaller's work with an expanded central place theory in a less structured but more regional plan. Similar to that of Geddes, this model has become standard for rural areas to small communities that are served by large towns, cities and regional capitals (Losch 1954). Losch's model exists all over the world, from the Midwestern United States to the English countryside: small communities that are served by towns, cities and regional centers. Unlike Christaller's fixed plan, Losch used spatial and geographic theory to explain levels of demand, where consumers go to larger cities to buy higher-value goods (Losch 1954). Ross looked at crossing borders in mega-regions, noting that "transportation and mobility hubs have historically proven to be advantageous to our cities, and by extension, regions" (Ross 2009, 141). Each of the above geographers, theorists, planners, or economists describe the plan or the section view that evolved into Duany's transect (Figure 2.4).

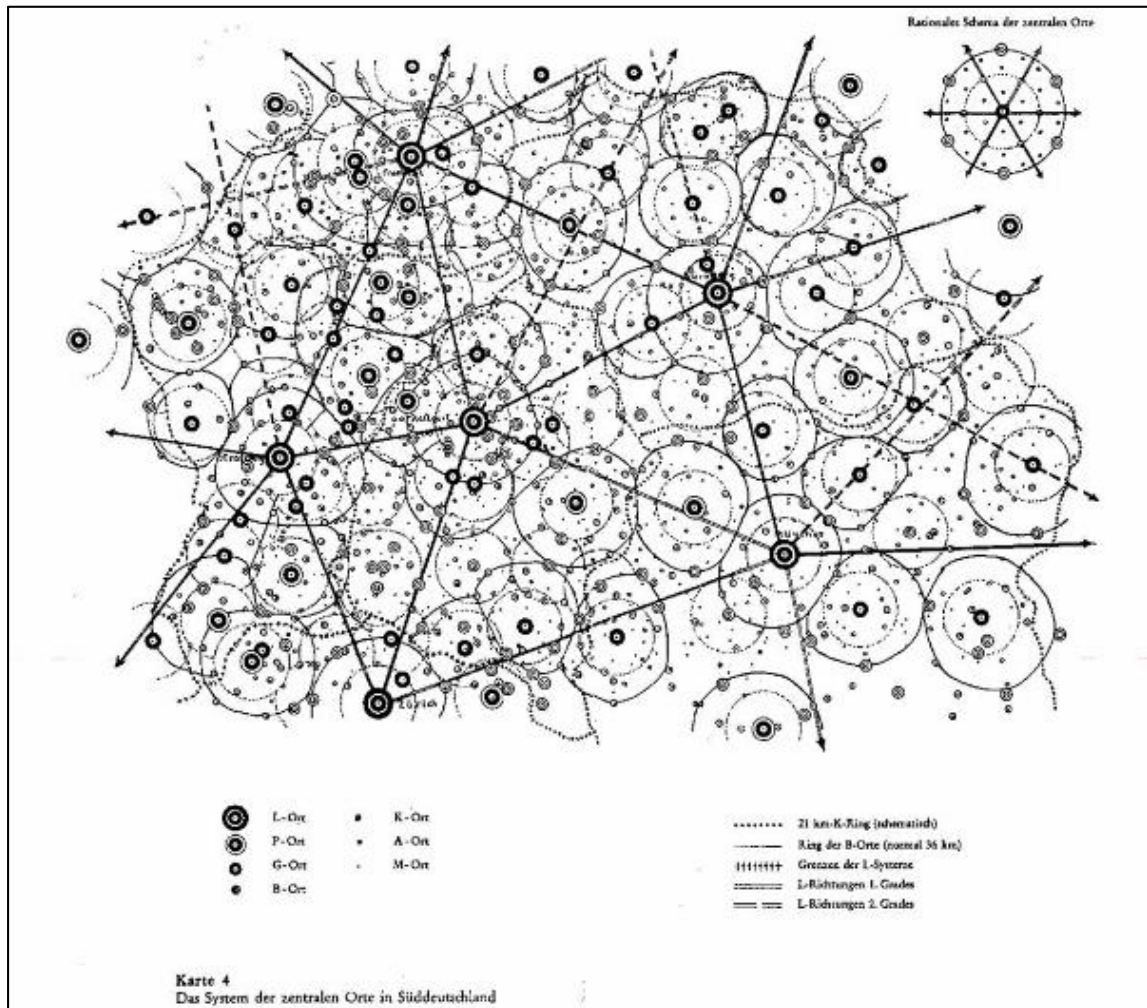


Figure 2.3 Christaller's Hexagonal Structure

Source: The External Structure of Cities,
http://cronodon.com/PlanetTech/Earth_cities.html (accessed June 12, 2014)

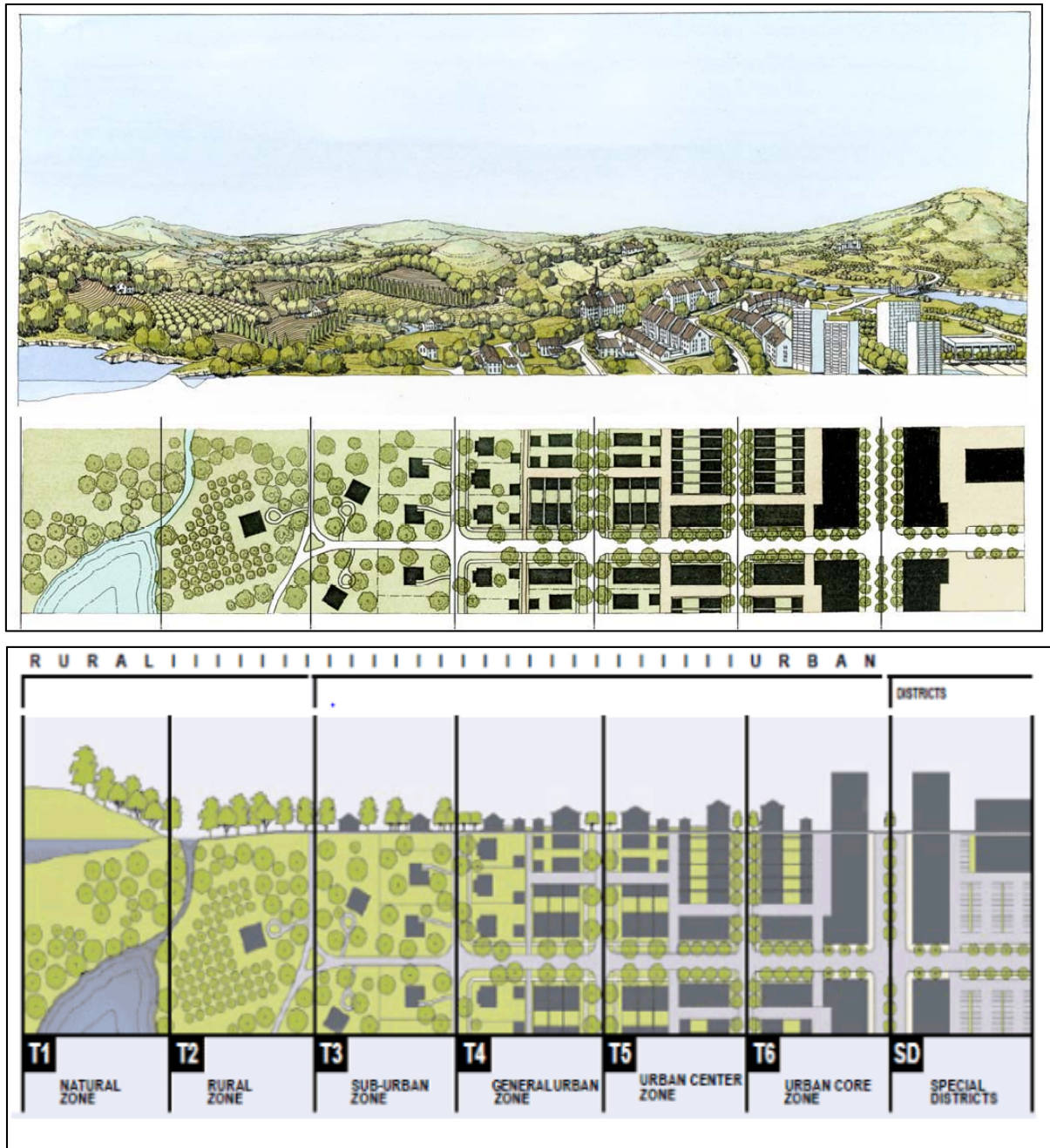


Figure 2.4 Planning Transects

Source: Parolek, Parolek & Crawford, 2008 (20)

2.1.1 Creating Zoning and Form by a Mosaic of Land Interests

Molotch, referring to urban investments and regulatory decisions, noted that it was city growth that caused politicians to make specific decisions regarding zoning. Each piece of the mosaic, Molotch asserts, survives at the expense of others, reminiscent of the Hotelling (1929) and Marshall (1890) review of economic development. There are, however, liabilities to this growth, such as controversies that development and land use designations inflict on neighborhoods and problems of unemployment, transient populations, infrastructure overload, overcrowded schools and zealous politicians (Glaeser 2011). The competition and liabilities play out over time, making some cities losers and some winners (Christopherson 2010, Glaeser et al. 1992).

Molotch's description of growth machines was clear, factual, and concise: "The clearest indication of success at growth is a constantly rising urban-area population" (Molotch 1976, 310-311). It is the fear of the industrial growth machine and its attendant health and air pollution issues that encouraged the use separation approach to zoning. Molotch referred to cities, regions and nations, as a "mosaic of competing land interests capable of strategic coalition and action." The growth machine potential expanded special district zoning laws that changed cities. The Midtown Manhattan theater district; museum districts in Dallas, Miami and Tampa; and the Silicon Valley Tech Museum of Innovation in San Jose are examples of how the growth machine empowered zoning, and zoning enabled growth (Logan and Molotch 1987).

Cronon (1991) described how railroads changed everything: cities along railroad corridors became growth machines (Losch 1954, Christaller 1933, Hoover 1937). When

rail containers came along mid-20th century, transportation expanded, and cities could not hold on to industry. New industrialists populated the suburbs and moved throughout the regions, taking advantage of cheap land and lack of unions (Levinson 2008, Heckscher 1919). According to Logan, there is “remarkable consensus today around urban theorists that growth is at the core of local politics” (Logan, Whaley, and Crowder 1999, 75). Logan described the concept of the city as better explained by the tension between business owners, developers, residents, and competing business elites—as in regime theory, which continued to influence the form and function of the design of cities.

2.1.2 Form, Function, Power and Regional Impact

Christopherson (2010) along with Bolton (1992) and Glaeser (2011, 1994) discussed how regional governance in the United States can make regions winners or losers. Employment is the major issue. Molotch (1976) and Glaeser (2011) described the results of elite flight and political zealots’ takeover when employment falls apart. Unemployment eradicates growth. When unemployment and lack of growth coincide, crime rates increase (Glaeser et al. 1992). Cities such as Buffalo, Utica, Syracuse, Flint, Lansing, Scranton, Cincinnati and others throughout the northeast are attempting to fix growth stagnation, industrial relocation and unemployment, which are seemingly unsolvable problems (Glaeser 1994, Glaeser et al. 1992, Glaeser 2011). These and many other cities are looking to form-based code as one solution.^{32,33}

³² Buffalo and form-based code <http://www.cnu.org/cnu-news/2014/06/buffalo-reboots-its-code> (accessed August 31, 2014).

³³ Utica and form-based code http://www.cityofutica.com/Assets/Departments/Urban-and-Economic-Development/PDF-Documents/Zimmerman_Volk_Study.pdf (accessed August 31, 2014).

Hoover's (1937, 91) definition of agglomeration appears to be the most accurate for our current economies: "The savings in unit cost that may accrue to the individual firms when a large enough number of them locate in one city. When such savings result from the agglomeration of firms in the same industry, they are known as localization economies because they depend on the local concentration of a particular activity." Hoover also discussed the homogenous groupings of people as the basis for regions. This is important in regard to development as each city is influenced by its elected officials and the racial structure of the population (Hoover 1937, Isard et al. 1998).

Krugman (1993) tied traditional location theory to geography. "Although the intellectual tradition of location theory is both wide and deep, what is taught is usually a very narrow set of geometric tricks involving triangles and hexagons" (Krugman 1993, 10). He further discusses how firms make independent spatial decisions not tied to geometry. In what could be considered an affront to Christaller (1933) and Losch (1954), Krugman takes Christaller's rigid hexagonal pattern and overlays the physical realities of topography and geography. In his tribute to Ohlin, Krugman said of his addition of geography (obvious to planners), "Simple models of regional divergence remains a mystery to me. The only good news was that nobody else picked up that \$100 bill lying on the sidewalk in the interim" (Krugman 1999, 14). Krugman clearly made an important point when he discussed industrial co-location and economic geography, which resulted in increasing returns in his new trade and economic geography theory and his 2008 Nobel Prize. Planners, designers and theorists throughout history understand how inexorably city form is predicated first on location/location/ location, then economics, regional industry, jobs and population. Form follows function (Sullivan

1896). Zoning and land use are the highest concentration of control and power in prosperous and deteriorating cities.

2.1.3 Design and the Ideal City

Kostof (1991, 15) prefaced his discussion of city patterns by saying that “Cities are almost never single minded. They may start out with a prime specialty, but they soon will acquire other uses.” Along with Kostof, Howard (1898), and Mumford (1938, 1961), many theorists recount the history of cities, listing the positive and negative decisions that drove city design from early times, with officials or the elite in control of building locations. Many cities in the United States were built primarily on historic plans with European precedents (Hack et al. 2009).

Ideal city plans aimed to address slums, poverty, health issues, and numerous harmful conditions attributing to the fast and unstructured city growth. Houssmann’s plan for Paris in 1855 and Burnham’s 1893 plan for Chicago began the surge of “City Beautiful” plans for cities. The L’Enfant 1791 and McMillan Commission’s 1902 plan for Washington, DC, and the introduction of the automobile in 1910, led to the propagation of master plans for cities. Throughout the 20th century, practitioners such as Harland Bartholomew built large national planning firms, designing hundreds of master plans for cities such as Los Angeles, St. Louis and Lansing, Michigan (Cook 1989a). Calthorpe and Fulton promoted the “region beautiful” as the plan to connect transportation, open space, public space, and land use, while “reintegrating Edge Cities with old cities and first-ring suburbs” (Calthorpe and Fulton 2001, 5).

In *Walking in the City*, originally published in 1980, de Certeau makes a case for the importance of views of urbanity from a pedestrian’s perspective. De Certeau begins

by describing the view of Manhattan from the 110th floor of the World Trade Center, which now evokes the horrific events of September 11, 2001 (deCerteau 1980, 2002, 92). Viewed from the top of the towers, 1,368 feet above the city, the streets become a maze of action with the viewer “looking down like a god.” This is precisely how most city planners experience the city: looking from above and over the city in plan, or flat view. The streets are perceived differently by the pedestrians, who experience the “down below” as a three-dimensional environment. As de Certeau states so eloquently, “they walk—an elementary form of this experience of the city; they are walkers” (deCerteau 1980, 2002, 93).

Pedestrians use the streets in their own way, and to their benefit, by organizing the spaces and streets in their minds. Lynch referred to this as “imageability;” Foucault described it as “mind mapping” (Foucault 1984, Lynch 1960). Pedestrians transform the grid of streets into their personal experience. City planners are often chided as missing the interplay of the paths and shortcuts that can only be experienced along the streets in what de Certeau elegantly describes as the “long poem of walking” (deCerteau 1980, 2002, 101). Conventional zoning is not synonymous with “walking poems,” while form-based code promotes walkability as the basis of the plan. Sidewalks, trees, and landscape are the spine of what form-based code labels “complete streets,” as described by the American Planning Association and Smart Growth America.³⁴

“What is the city but the people?” Shakespeare’s Sicinius asks in *Coriolanus* (Johnson et al. 1833, 643). The people use the city as a stage, with urban drama

³⁴ Complete streets defined by the American Planning Association <https://www.planning.org/research/streets/> and Smart Growth America <http://www.smartgrowthamerica.org/complete-streets> (accessed September 1, 2014).

unfolding like a kind of ballet (Jacobs 1961,1992, Gehl 2010, Whyte 1980). City planners are often labeled the engineers of the city rather than the designers. “Most of our housing and city planning has been handicapped because those who have undertaken the work have no clear notion of the social functions of a city” (Mumford 1961, 92).

2.1.4 Sustainability

Norton (2005, 314) calibrates sustainability from weak through strong “maintaining resilient ecosystems” and describes how communities and countries can manage nature. McHarg (1991, v) in retrospect described his 1969 *Design With Nature* as conservative and that over the next 20 years “Events far exceeded predictions.” Sustainability is described in terms of urban development as protection and preservation of the natural environmental infrastructure.³⁵ Palazzo and Steiner (2011) describe the environment, sustainability and urban design with a combination of density and ecology. United States urban design has a long tradition of planning. Thompson and Steiner (1997, 30) summarize; “Planning that strives for fitness between people and the landscape, therefore, is one of the promising ways to reestablish the form and content of the dialogue between human and natural processes.”

Research of sustainability related to form-based code relies primarily on the aspect of the walkability of neighborhoods and cities illustrated with a dashed line connection in Table 2.1. Anderson (2008) discussed the problems with conventional zoning as focusing only on use which is counter to form-based code positive aspects:

By relating buildings back to the street and open spaces, rather than on parking lots or private yards, public spaces are redefined from the conventional automobile—oriented scale to the human or pedestrian oriented scale. This focus

³⁵ United Nations, Agenda 21 <http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf> (accessed November 10, 2014).

allows form-based codes to guide the creation of active sustainable neighborhoods. (Farr 2008, 88)

2.2 Euclidean Zoning as a Panacea

Zoning came in a wave through cities in the United States as the remedy to questionable building and planning decisions and with the health, safety and welfare of residents as its purpose. Colean (1953, 26) labeled zoning the “panacea” and noted that it was quickly enacted: “The fact was that change was so sudden, so rapid, and so unprecedented in its implications, that the effects were fully upon the cities before they were more than partially grasped.” Birch (2009, 88) discusses “zoning’s quick acceptance” as the result of several actions, including: (1) the 1926 United States Department of Commerce Standard Zoning Enabling Act (SZEa); (2) the 1928 Standard City Planning Enabling Act (SCPEA); and (3) the Supreme Court 1926 decision upholding zoning in the case of *Euclid Ohio vs Ambler Realty Company*. Scott (1969) noted that:

Urban America was in something of a zoning crisis in the early 1920s. Like a patient who could endure his fever until he suddenly learned that there was a new remedy for it and who was then impatient to be cured, urban America was now sure that it would perish if it did not have zoning. (Scott 1969, 192)

Scott went on to note that local and state courts adjusted their rulings to abide by the Ambler decision, noting that “as long as zoning ordinances were reasonably related to the community health, safety, morals, and general welfare” (240) judges would leave zoning within the purview of the local city councils. The wave spread from New York

City throughout the country quickly (within 20 years) without the modern-day benefits of internet and social media, but primarily by word of mouth and newspapers (Colean 1953).

In 1922 Frank Backus Williams, the New York attorney often referred to as the father of zoning, authored the first zoning book: *The Law of City Planning and Zoning*. Williams was the chairman of the City Planning Committee of the City Club of New York and director of the Municipal Art Society. He drafted the New York City Planning Law adopted in 1913 and spent time in Germany studying the first planning laws in 1914.

Williams (1922) notes that early references to zoning by land use first appeared in Berlin at a meeting of the German Architects and Engineers Society in 1874. The concept, established by Napoleon I in 1810, was built on an administrative permit that protected residences from “establishments which disseminate an unhealthy or unpleasant odor” (Williams 1922, 210). By 1894 Germany was enforcing land use and bulk zoning, as Williams notes: “like workmen’s compensation and so many other social measures soon spread to other lands.” The provision was part of the Imperial Industrial Law that evolved into overlays of “protected districts,” where residences and businesses were protected from industrial uses.

Bulk zoning is first attributed to Franz Adickes, mayor of Frankfurt-on-the-Main, in 1891. Form-based code finds much of its origin in bulk zoning, which regulates density and form, although it is not attributed to Adickes.³⁶ Town planning in this era was approved by the city’s political class. Willis (1986, 47) noted; “the New York law

³⁶ Bulk zoning regulates density and floor area ratio (FAR) by use of height and setback restrictions.

had been passed through the combined efforts of urban reformers and city planners, allied with wealthy real estate owners who wielded the requisite political clout.” Tall buildings were located in the town center, regulated so that the height could not exceed the width of the street plus two meters—an early predecessor of form-based code. The roof pitch was regulated at 45 degrees. Residences were topped at five-story walk-up with the cheaper space on the highest floor. Often residential apartments were built over retail and service businesses, as these uses were considered compatible: merchants could live over their shops. Offending business and manufacturing concerns were located along transport or rail lines, and were not regulated as to bulk and appearance (Talen 2012, Williams 1922, Hirt 2007). Referred to as “zone ordinances,” these district plans were used for the expansion of the outer cities of Berlin and Frankfurt. The district plans were similar to Figure 2.5 by Ebenezer Howard, published in 1902 (Howard 1902, 1946).

Zoning by height, use and building area was regulated in many European cities. Manufacturing districts were separated and located in permitted sections of the city. The inner city was often protected by use, location and bulk by the business community or sometimes the “building police” (Williams 1922, 255). Specific districts for business were not separated from residential areas in Europe. It was not until zoning moved to the United States that specific separations of use were implemented (Williams 1922). Reps (1964, 37) refers to planners as having “attempted to prepare detailed standards for development which are supposed to cover all conceivable situations. We have Balkanized our cities into districts with precise and rigid zone boundary lines. We have established categories of uses that have segregated rather than integrated functional

portions of cities.” *Euclid v. Ambler* (1926) established separate districts and endorsed zones by use separating residential, commercial and industrial use. The law is widely acclaimed as the method that upheld the health, safety and welfare of the American public and is the essential element of land governance.

Figure 2.5 Ebenezer Howard 1902 Illustration of the “Group of Slumless, Smokeless Cities” Located Around Philadelphia

2.2.1 Conventional Zoning as a Good Faith Effort

abuses of zoning were not only inevitable but also intentional,” but qualifies that with the conclusion that “over the past one hundred years zoning was a good-faith, though certainly imperfect, effort to improve the quality of life for future residents, and their future residential, commercial, and industrial neighbors.” Developers, politicians, lawyers, the community and planners all bear some responsibility for the effects of zoning. The main faults that Wolf identifies are: (1) an absence of social justice, (2) the isolation of residential uses and (3) the suburbanization of the development.

As mentioned throughout this dissertation, development and politics often play a complicated and negative role in zoning. Clawson summarized the zoning experience clearly:

If one retains the right lawyer, dresses up his rezoning proposal in attractive language, perhaps makes a gift of land for schools or parks or otherwise appeases some local opposition, and properly emphasizes employment the result is really not in doubt. The costs of such concessions and gifts, and the delays of getting favorable action, are less predictable and may prove onerous. But it seems clear that local zoning in an expanding urban or suburban area is not really an effective barrier to most kinds of development. (Clawson 1971, 253)

Developers have adapted zoning to further their real estate interests and, in many cases, their interests facilitate the planning and regulatory environment, according to Boyer (1983). Wolf (2008, 161) labels this interaction the “profound effect,” stating that “there are those who advocate wrenching local planning and zoning decision from the hands of local government officials” when discussing bribes and corruption in zoning decisions that elected officials. Diaz (2013, 177), former Miami mayor, praised Miami 21 for replacing “the old building code where lawyers, lobbyists, and special interests controlled development” in an attempt to decrease the influence of wealthy and political classes on zoning.

Lack of zoning is considered a recipe for poor development. While Houston is the epitome of anti-zoning and land use regulation, it is also home to well-organized neighborhoods that have “connectivity” and easily navigable streets and networks. Interestingly, such free market planning promotes mixed use in the neighborhoods, with “more evenly distributed mixed land uses” allowing Houston development to become similar and often times better than other cities (Qian 2011, 39).

New Urbanists are highly skeptical of the segregation of uses, with separation of residential and commercial uses being a particular frustration. Duany et al. (2000) state that for communities to avoid sprawl;

If our communities are to recover from sprawl, they need both new regulations and a new regulatory environment. Existing zoning ordinances—typically outdated, overcomplicated, and vulnerable to influence peddling are often discredited but rarely discarded. The flaws of these ordinances are too many to mention here, but can be gleaned through even cursory reading. Most need radical restructuring just to open the door for traditional development.” (Duany, Plater-Zyberk, and Speck 2000, xx)

Restructuring is what New Urbanists believe they accomplished beginning with Seaside in the 1980s: the “first form-based code since Haussmann’s 19th century Paris and New York City’s efforts of 1915–1916.”³⁷ The original 1992 Seaside standards comprised a single page of text (Geller 2010).

2.3 Zoning is Destiny

Regarding practice, early 20th century public and private planning practitioners had plenty to do to keep their city, county and region competitive and afloat in the new economy. The American city, overcrowded, with health issues and often chaotic development, was at on the verge of change. Early planners were fervent in their desire

³⁷ Seaside library, <http://seaside.library.nd.edu/essays/the-code> (accessed June 5, 2014).

to make the city better, envisioning zoning as destiny: “The American city of the Future should be more orderly, more healthful, more efficient and more beautiful place than any developed” (Hessell 1922).

Of the early days of planning and zoning, the 1920s, Boyer (1983) explains: “Part of the process, then, was to conserve and restore impaired land values, to supervise the use and the occupation of land, to regulate the cities tenements, offices, buildings, circulation means, distribution of public space and private land, and to promote the efficiency of its market activities” (Boyer 1983, 69, 104, 157). Districts were drawn into what Boyer referred to as “cells” to restrict which uses could be built. Zoning was referred to as “the practice of boundary management” and the action to “compartmentalize different categories of land use by providing proper districts for industry, trade and residences” to further “profitable and unprofitable uses.”

These boundaries are the separation of uses, which Hirt (2012, 2, 23) refers to as exclusionary zoning and the cause of “a number of economic, social and environmental issues.” Hirt looks at the opportunities for mixed use development in 20 large cities with the premise that “Of course, no one would argue that cities should be all mixed use.” Her observation is that cities have made only “tentative progress” to include mixed-use districts. Hirt’s conclusion: “For the millions of Americans whose homes are located in areas dedicated solely to housing, buying a cup of coffee, going to a restaurant and going to work all require a car trip—a car trip that is virtually mandated by law.”

City planners became rooted in administering zoning over the last 100 years. Its nature, character, legality and regulations have informed a large part of what planners do

on a daily basis. The 1948 *Local Planning Administration*, known to planners as the “green book” explains:

Zoning is enacted under the police power, which is the power of the community to make regulations for the purpose of promoting the public health, safety, morals, or general welfare of the people of the community, without the payment of compensation. The limits of this power have never been precisely defined and they probably never will be, for they are being constantly extended to meet the needs of an increasingly complex civilization. (1948, 222)

2.4 Form-Based Code

The term *form-based code* was first used by Carol Wyant, former director of the Form-Based Code Institute (FBCI), as the proposed title of a 2001 presentation to the Chicago Zoning Reform Board (CZRB) by a New Urbanist team of architects.³⁸ Chicago’s 1957 code enacted an average of 900 amendments per year to remain up to date. Mayor Richard M. Daley decided the city needed a new direction for the 21st century. In lieu of turning over the new zoning code to a consulting team of New Urbanists, the CZRB decided to revise the way the city handled zoning by organizing a small team of planners to conduct hundreds of neighborhood meetings in an effort to inform, build public constituency and educate their community. “The city’s leaders needed the participation of the public in order to forge the political support (and perhaps the political cover) to tackle major revisions for the zoning code.” Based on these meetings, the planners wrote the new code line by line, working through it in great detail with the community. The process is noteworthy for its highly integrated public process, which garnered support for an effective result in less than three years. “Against all odds,

³⁸ History of form-based code, <http://formbasedcodes.org/history> (accessed June 16, 2014).

the Chicago City Council voted to adopt the new zoning code in May 2004” (Faga 2006, 155,122).

Form-based code surfaced again when the Knight Foundation funded a \$1 million strategic plan to rebuild the Mississippi Gulf Coast after the devastation from Hurricane Katrina in 2004.^{39, 40} Andres Duany co-chaired the charrette to oversee the preparation of plans for 11 towns, and invited 200 designers and public officials to work with the community.⁴¹ The resulting plans referred to form-based codes and SmartCode as the zoning tool for the rebuilding effort. Planners and architects noted the advantage of the new code as easier to comprehend due to the drawings and illustrations rather than the narrative descriptions in conventional zoning (Langdon 2006, 28). Disadvantages listed are an overly site-specific approach and a high cost. The design teams also noted that it was “prohibitively expensive to do form-based coding for an entire community unless it’s a very small space.” Langdon quoted Peter Katz: “Most of what a form-based code regulates is at the neighborhood scale or smaller.” Speck, too, discussed the code as being primarily residential and suburban-oriented in its original intent.⁴²

Allan Jacobs noted: “It is no more reasonable to expect that zoning enacted to help achieve a city plan will go unchanged than to expect the plan itself to remain forever intact. People’s values, ideas, and perceptions of reality will change, and what

³⁹ August 31, 2005, Knight Foundation Pledges \$1 Million in Grants to Help Biloxi Hurricane Victims, <http://www.knightfoundation.org/press-room/press-release/knight-foundation-pledges-1-million-in-grants-to/> (accessed June 16, 2014).

⁴⁰ September 19, 2005, Knight Foundation Commits \$1 Million For Strategic Planning for Gulf Coast Rebuilding, <http://www1.knightfoundation.org/press-room/press-release/knight-foundation-commits-1-million-for-strategic/> (accessed June 16, 2014).

⁴¹ February 23, 2006, Alberto Ibargüen, President, John S. and James L. Knight Foundation: Rebuilding the Mississippi Gulf Coast, <http://www.philanthropynewsdigest.org/newsmakers/alberto-ibargueen-president-john-s.-and-james-l.-knight-foundation-rebuilding-the-mississippi-gulf-coast> (accessed June 16, 2014).

⁴² Jeff Speck, Interview with author. Phone interview. Atlanta, August 10, 2012.

may seem eminently desirable today may seem less so tomorrow” (Jacobs 1980, 249). Practicing planners are aware that change drives innovation. Politicians believe the same. Churchill’s (1944) often repeated quote, “We shape our buildings and our buildings shape us” (from his speech to the House of Commons on October 28, 1944) is the reverse of Sullivan’s “form follows function” objectives (Sullivan 1896).

Duany, Plater-Zyberk and Speck (2000) discussed shape, form and sprawl in their first book that explained New Urbanism: *Suburban Nation*. Modern suburbia and traditional neighborhoods were compared in terms of transportation, schools, downtowns, and civic institutions in regard to American live and work patterns. Smart growth and streets are mentioned throughout, but the book predated the terms form-based code and SmartCode.⁴³ Duany states that his objection to Euclidean zoning is that “most zoning codes focused on numbers and ratios rather than physical form, (and) can’t tell the difference between a dingbat and block of row houses, as they may be statistically identical” (Duany, Plater-Zyberk, and Speck 2000, 176).

The major goal of form-based code is to compel a mix of uses. In addition to Duany, several other authors describe the anticipated disorder but welcome nature of the city. An early advocate of mixing uses, Jane Jacobs (1961) described the complexity that cities require: “Their intricate order is a manifestation of the freedom of countless numbers of people to make and carry out countless plans” and adds that it is “in many ways a great wonder” (Jacobs 1961, 1992, 391).

Rybczynski (2010) described the mixed-use qualities of Broadacre City, Frank Lloyd Wright’s ideal Midwestern city as having “no functional zoning; instead schools,

⁴³ *Suburban Nation* is presented visually, <http://prezi.com/h8qvbmouk3r8/suburban-nation-presentation/> (accessed June 15, 2014).

civic buildings, factories” are “scattered among orchards, vineyards, farms and recreational spaces” on standard one-acre parcels, similar to an early garden suburb. This sets the tone for what Rybczynski describes as the new generation of New Urbanist communities, including Baldwin Park and Celebration, Florida, along with Stapleton, Colorado, all of which are reminiscent of those garden suburbs. Raymond Unwin established the fundamentals of the early garden towns in the 1930s, long before the New Urbanists envisioned form-based code with, “compactness and variety in design, heterogeneity in house types, walkability and compact neighborliness” (Rybczynski 2010, 86).

“Law cannot, of course, compel community beauty; it should not, on the other hand, produce ugliness” (Goldston and Scheuer 1959, 265). Just as cities and buildings change, so does regulation. Mixed-use districts are the predominant alternative to Euclidean zoning. Burchell (1972) considered planned unit developments to be mixed-use, relying heavily on residential as the primary use with the best and most favorable land preserved for housing. Hirt illustrates how form-based code has a limited effect on mixed-use development:

But a closer look at the New Urbanist proposals shows that they are not as friendly to mixed use as one might expect. Only their first two zones, “urban center” and “urban core,” may qualify as mixed use. Their “suburban edge” zone is only for single-family detached housing with possible civic and office uses. Their “general urban zone” is for single-family detached and row housing with retail “confined to designated lots, typically at corners. (Hirt 2012b)

2.4.1 Precursors to Form-Based Code

In her history of zoning in New York and Chicago, Willis (1986, 59) discussed form as the primary intent: “More than a legal formula, zoning became a form-giving principle behind a new vision for the modern metropolis. Zoning had *meaning* for the

architects of the twenties,” she asserts, using examples such as the limits placed on architecture; height and bulk restrictions, the concept of a building envelope; and distinctive massing requirements. Architects were “almost unanimously positive” about zoning as it gave them the opportunity to envision future cities.

Cullingworth (2009) describes a plethora of precursors to form-based code, including New York City’s 1961 incentive zoning: bonuses given to developers for an arcade, public plaza or another amenity. Inclusionary zoning or density bonuses are the 1970s programs that allow for increased density as an incentive to include affordable or lower-income housing. Performance zoning allows for higher intensity of uses to protect a natural resource or environmental standard. Cullingworth notes that each of these, and an additional list of 20 special zoning designations, allowed elected and zoning officials to pattern their zoning to fit their locale.

With “Chapter 40R,” Massachusetts enacted smart growth zoning districts that encourage higher density with affordable housing in mixed use developments. These overlay districts, which are in over 30 locations throughout the state, must include three components: (1) transit within one half mile; (2) an Area of Concentrated Development (ACD); and (3) a Highly Suitable Location (HSL) for mixed-use development with access to existing uses. In 2014, these overlay districts comprised 11,194 units on 1,409 acres. State funding included \$3,000 for each new housing unit and \$10,000 to \$600,000 (Giaimo, Blaesser, and Lawler 2005).⁴⁴

Pattern books are the design code for New Urbanist towns that describe and illustrate every aspect of development plans. Pattern books are historic, dating back to

⁴⁴ Massachusetts Housing and Economic Development, <http://www.mass.gov/hed/community/planning/chapter-40-r.html> (accessed May 13, 2014).

the last part of the 19th century when put in place to describe in detail the form and function of residential communities. The Celebration, Florida 1994 pattern book was predicated on pre-World War II housing design; the Baldwin Park, Florida 1998 pattern book was based on housing designs from early 20th century town plans. Pattern books are often referred to as a necessary development tool for traditional neighborhood development (Geller 2010).⁴⁵

Siegan (1970, 143) thoroughly investigated the positive and negative aspects of the lack of zoning in Houston in support of the criticism of zoning laws expressed by the American Society of Planning Officials (ASPO) in the 1960s.⁴⁶ He concluded: “No matter how bad the Houston system, it could hardly be worse than what is described as having occurred under zoning.” In response to the additional zoning that communities put in place: “The dogma persists that if zoning does not work, it is desirable to try more of it.” Siegan states the result of the Houston study in ten points: (1) separation of uses occurs as a result of economic forces; (2) property owners enter into agreements for their own protection; (3) neighborhood covenants are restrictive, like zoning; (4) economic pressures dictate land use; (5) zoning can impede innovation; (6) a city without zoning is not subject to political development pressure; (7) multi-family units were not often built under zoning; (8) FHA noted the housing appreciation in Houston was comparable to other cities; (9) zoning freezes land use patterns; and (10) failure of controls leads to tighter controls.

⁴⁵ Pattern books: A planning tool, Emily Souza, <http://plannersweb.com/2008/10/pattern-books-a-planning-tool/> (accessed March 15, 2014).

⁴⁶ The American Association of Planning Officials (ASPO) published proposals for the reform of zoning in 1968, “*Problems of Zoning and Land Use Regulation*” (National Commission on Urban Problems Research Report, No. 2) https://openlibrary.org/books/OL5635023M/Problems_of_zoning_and_land-use_regulation (accessed December 23, 2012).

Finally, issues with zoning stem from its legislative mission: to satisfy and protect the status quo and property values. Involvement of the community in the process of protecting their interests, neighborhood and community gave rise to zoning enforcement. Steele (1986, 749) refers to this as giving citizens “the right to represent the community’s collective interest” and it became one of earliest opportunities for the participatory processes that set the stage for communicative planning theory. Steele states that along with determining the rules for public process and the standards for city development, the goals were to:

Achieve a variety of policy objectives good and bad—among them racial or economic separation, historic preservation, open spaces, preservation of farm or natural lands, air and water quality, fair or affordable housing, aesthetically pleasing architectural design and the conservation of existing neighborhoods and communities (Steele 1986, 710).

2.4.2 Acceptance of Form-Based Code

Form-based code is a recent genre. Talen and Duany have a long list of books and articles that describe the merits of mixing uses by implementing form-based code. Talen (2013) relates that Euclidean zoning promotes single-use subdivisions, transportation plans that do not promote connectivity, and a lack of walkability—each of which are characteristic of sprawl. Regarding the adoption of the new codes, they are in use in many cities:

Codes may be optional overlays, floating zones, district regulations, or FBC-type requirements appended to existing design standards. The codes may be project-specific and apply only to a station area, a central business district, or a section of a street, or they may apply to a neighbourhood, a section of town, or an entire city or region. They may be hybrid codes, in which form-based coding requirements are added to a conventional zoning code. (Talen 2013)

Katz listed eight advantages of form-based code. They: (1) state what is possible and are prescriptive; (2) encourage public participation; (3) encourage independent development; (4) reflect a diversity of architecture; (5) codify neighborhoods DNA; (6) are easier to understand for non-professionals; (7) obviate the need for design guidelines and (8) may be more enforceable than design guidelines (Cullingworth and Caves 2009).⁴⁷

Inniss discussed the approach of many form-based code advocates as relying on “alternative visions of the city of the past.” Initially calling themselves “neo-traditionalists,” the New Urbanist planners often look backwards to the “pre-zoning city as a model”, which “glide(s) over flaws in order to sustain the myth of our ideal urban past.” Inniss discusses that form-based code is not “un-planning” or un-zoning, but “alternative zoning or planning by persons who in many cases may not be accountable to the larger community” (2007, 75, 89, 93,103). Inniss concluded that zoning is often not the problem for cities; there are often combined problems of power and social exclusion, and form-based code is not salvation:

Formality in the context of traditional zoning is not the source of ill-functioning cities, social exclusion or the skewed power dynamics that are often seen in American cities. Rather, these ills and especially the creation and maintenance of privilege are accomplished by myriad means. What New Urbanists fail to acknowledge is that form-based code, all while promoting an ethic of neighborhood self-government, may itself be coopted as a tool for perpetuating disadvantage. (Inniss 2007, 103)

2.4.3 Definitions and Regulations

⁴⁷ Peter Katz list from the Tampa FL government, https://www.tampagov.net/dept_land_development/files/Eight_Advantages_to_Form.pdf, (accessed June 15, 2014).

Sitkowski (2006) discusses the legal aspects of form-based code including its roots in private covenants, similarity to architectural regulations, and the unanticipated problems that may arise with a new code. The legal article includes the most accurately detailed description of form-based code elements:

- *The Regulating Plan.* A "key map," close to but different from a zoning map, showing the sites for various buildings, street types, build-to lines, and, in some cases, design features.
- *Urban Regulations.* These regulations are commonly presented in the form of a matrix with supporting diagrams covering bulk, height, coverage, and "in-building" use standards, and are generally recognizable as such as they are presented in conventional land development regulations. These standards are organized by building type, rather than land-use type, categories.
- *Street Regulations.* These regulations present, in a graphical form, the width and dimensions of streets, sidewalks, paths, curb heights, street-side parking requirements, allowable turning radii, and other standards applicable to streets. It is an open question whether these standards should be included in the "zoning" regulations in jurisdictions that have a bifurcated zoning/subdivision scheme rather than a unified development ordinance approach.
- *Landscape Regulations.* These provisions govern permitted species, sizes, and locations of trees and other plantings.
- *Architectural Regulations.* These necessarily diagrammatic and graphical regulations govern the building styles, details, and materials that are permitted and the ways in which they can be incorporated into various building elements such as walls, windows, fences, and roofs.

Not every set of form-based land development regulations includes each of the five elements. Some elect not to include the architectural regulations based on the argument that they are the most objectionable from a legal standpoint (Sitkowski and Ohm 2006).

Parolek (2008) wrote the manual *Form-Based Codes*, often referred to as the guidebook for planning and implementation. In his review, Cole (2009, 92) describes the book as a rubric to "demystifying the components and process by providing real world examples." This guide reduces the complicated elements of the new code into three

sections: (1) components, (2) process, and (3) case studies, each focusing on the elements that promise to return city planning to the elements of design prior to Euclidean zoning. Form-based code advocates unifying all codes, including subdivision regulations. Many cities have unified zoning and subdivision regulations over the last 30 years. Parolek illustrates the use of subdivision standards in the Santa Ana Specific Plan case study.

Walters (2011, 216) further praises a Beaufort, South Carolina process of adapting as the “smart future,” saying that it uses “localism” to enable urban design that is “rooted in participatory democracy, utilizes electronic media to structure and extend democratic debate.” The results are “clear implementation strategies and regulations through the use of form-based or design coding.” Online town halls to discuss the attributes of rezoning are a new trend that “is a clear advancement of design-based planning in the USA.”

Geller (2010, 83) described the legality of form-based code in Florida, cautioning that challengers to the new code may find that it “inconsistent” with the localities’ comprehensive land use plans. The code must: “(include) compatibility between adjacent uses, provide for meaningful open spaces, protect environmentally sensitive lands, regulate signage, ensure safe and efficient traffic flow, and provide for necessary parking.” This discussion was predicated on form-based code compatibility under the 2010 Florida Growth Management Plan. The law was repealed in 2011 by the

Florida General Assembly, although many communities retain comprehensive master plans that were developed under the 2010 law.⁴⁸

2.4.4 The Negatives of Form-Based Code

Michigan Association of Planning (MAP) (2007) published their overview of form-based code and listed several “pitfalls,” including: (1) the cost is two to four times more than conventional zoning plans; (2) the regulating plan is more complicated, definitive, and expensive than the standard zoning map, (3) the limitations to working on public streets due to local and state engineering laws, (4) the codes are prescriptive and rigid, making it difficult for developers and architects; (5) there is a lack of enabling legislation that allows for form-based code; and (6) the lack of environmental sensitivity in the grid design (Purdy 2007).

Leigh and Hoelzel (2012, 100, 96) refer to the “blind side of the smart growth movement” in their compelling study illustrating how cities and New Urbanist policies often do not protect and safeguard industrial uses, leading to a decrease in job opportunities and economic growth. Industrial uses are seldom mentioned in smart growth (or form-based code) literature and the authors note that they should not be “an either/or proposition.” Finally, the “slow recovery from the Great Recession, the high residential and office foreclosure and vacancy rates, the fiscal woes of cities, and the high urban unemployment rate are all compelling reasons for the smart growth movement to widen its vision to include urban industrial revitalization.”

⁴⁸ Florida Growth Management Plan of 2010 repealed in 2011
<http://www.newgeography.com/content/002471-florida-repeals-smart-growth-law> (accessed June 4, 2014).

Garnett (2013, 5, 1, 7, 12) discusses the over complexity of form-based code as “at places rivals that of the Internal Revenue Code.” Garnett is sympathetic to the mixed-use feature of the new “code du jour” while lamenting that New Urbanists do not abide by Jane Jacobs’ philosophy of letting cities develop in a more libertarian style—that is, without regulations. Garnett states that “many New Urbanists do not believe that an acceptable built environment can be achieved by private ordering but rather must be accompanied by regulations dictating the building design elements.” Jargon, such as “human scale qualities of the building,” “visual interaction with all stories of the building,” and “street activating uses”, is identified as a possible legal difficulty for design enforcement.

It is important to note that zoning is often subject to elements that are specifically presented to the community to gain their trust. Whether these include elements of Euclidean zoning (the land use plan and zoning code); or form-based code, including the regulatory plan and detailed transects, “Things matter in how we relate to others” (Beauregard 2012, 188, 184). They matter because they “reinforce the words” of the planners. Beauregard paints an accurate picture of the things that planners use to convince the community, such as plans, photos and illustrations. Similarly, the design, the look, of the elements that form-based code proponents use in their presentations is important. Drawings are beautifully prescribed to illustrate, in section and sketch form, the proposed vision to the community. Unlike conventional Euclidean zoning, illustrated by a flat plan with standard colors (red for commercial, yellow for residential), form-based planners present photographs, models and site plans to convince clients and the community Forester (1999). Form-based code proponents understand that it is the

quality of these “things” that planners use to facilitate approval and the “sale” of the changes that will be enabled.

While for form-based planners the quality of form-based code product is tantamount, there is a discussion regarding regulating the amount of product they may put forward. For example, as was mentioned earlier, the Seaside code in 1985 was a single page. The Miami 21 code as amended April 11, 2013 comprises almost 700 pages in two volumes: Volume 1 of the code is over 383 pages and Volume 2 (Appendices) is over 300 pages and growing. Much discussion in academia and practice, and between “formers” and “zoners,” focuses on the continual expansion of regulation. Specificity of design detail (including window mullions, awnings and street lights) led one professional to note that the new form-based code regulations are “literally hundreds of pages long for one little town or even a neighborhood. God help us if these planners don’t get some perspective soon or we will be forced to inhabit stultifying, highly regulated, 19th-century theme parks.”⁴⁹

⁴⁹Email discussion with survey respondent, January 2, 2014. By author.

CHAPTER 3

STUDYING FORM-BASED CODES IN PRACTICE

This research method is structured to answer the following questions: What is the motivation for the change from Euclidean zoning to form-based code? Who are the primary leaders for change? How are communities implementing form-based code? What is the impact of change in time, cost and public process? The analytical framework for this research includes two protocols as follows, which are illustrated in Figure 3.1.

- **Protocol One** is an online survey of planning officials and professionals in communities that have adopted, or are in the process of adopting, form-based code.
- **Protocol Two** includes studies of three cities where form-based code is currently being implemented: Denver, Miami, and Cincinnati.

The focus of the two protocols is organized around four metrics: (1) contextual factors; (2) adoption decisions; (3) implementation; and (4) outcomes, as shown in Figure 3.1 and Table 3.1. Contextual factors include zoning issues that the community believes could be improved by implementing form-based code. Adoption decisions are the concerns that the community addresses to make the code change. The tasks necessary to move from adoption to implementation are a substantial hurdle that is widely recognized by practitioners. Outcomes are those intended, and often unintended, consequences that emerge with change within an established community.

- (1) Evolution of the foundations of zoning from the late 19th century
 - (2) Urgency with which communities established zoning codes
 - (3) Establishment of Euclidean zoning in early 20th century
 - (4) Why are communities changing from Euclidean zoning to form-based code?
-

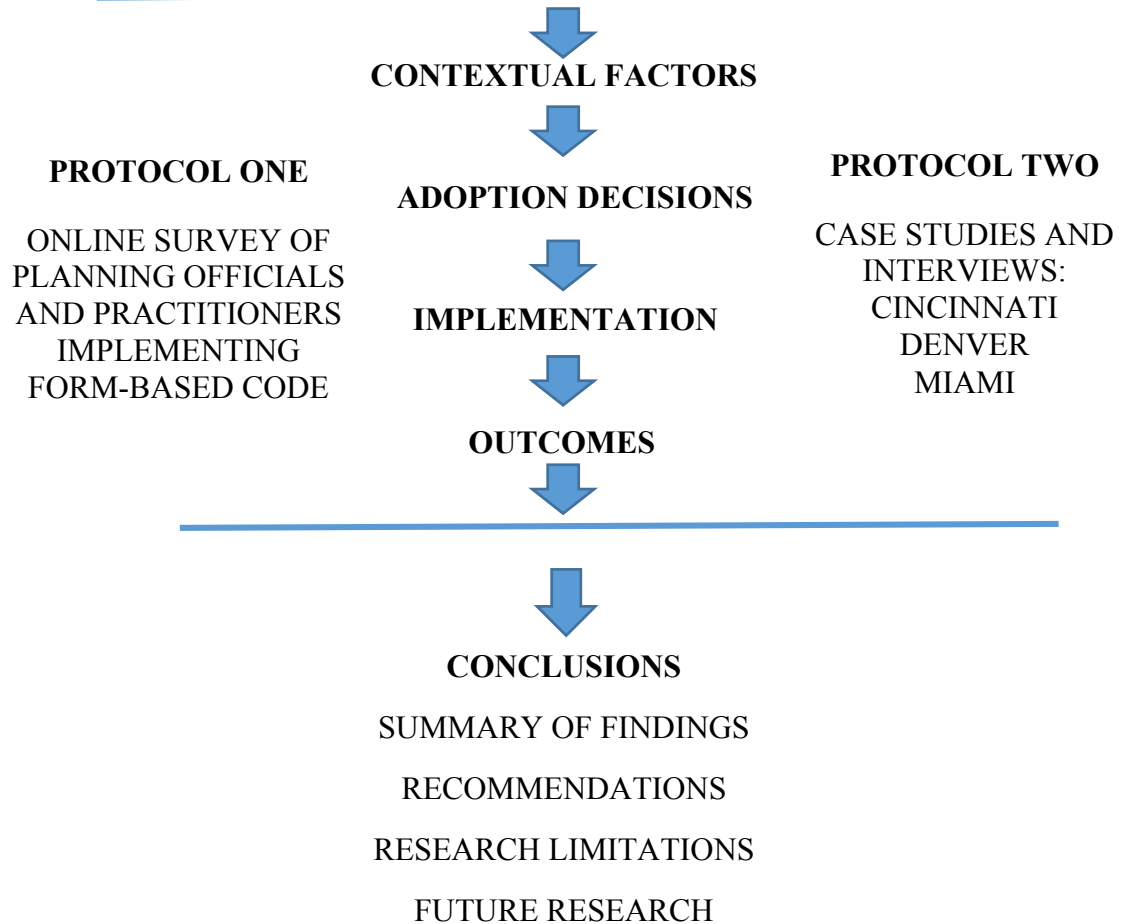


Figure 3.1 Analytical Framework

Table 3.1 Method to Address Case Studies

	Research Question	Method
CONTEXTUAL FACTORS	What are the issues with current zoning that the community wants to solve?	Investigation of the issues that record what the community wants and needs, by survey and case studies.
ADOPTION DECISIONS	How does the community decide to adopt form-based code? Who or what group leads the discussion?	Analyze narrative responses to the survey questions. Analyze interviews and case studies.
IMPLEMENTATION	How does the community apply change?	Determine how the community changes their approach to zoning.
OUTCOMES	Will the change to form-based code solve the issues previously identified?	Analyze results of research protocols.

3.1 Two Protocols

The two protocols (surveys and case studies) are significant elements of this research. The online surveys are used to determine practitioners experience and response to form-based code. The case studies are necessary to understand the effect of code implementation on communities. Understanding how change affects planning, practitioners and communities through their responses is essential to this research and

must be assessed from both reported experience and quantifiable reality. Experienced planners are familiar with the concept of “muddling through” and the “wicked problems” that result from change, which are discussed further in the case studies (Lindblom 1959, Rittel and Webber 1973). The Protocol One survey is important to determine planning practitioners’ issues regarding contextual factors, adoption decisions, implementation and outcomes. Protocol Two, the three city case studies, provide detailed information from practitioners of communities where form-based code has been presented, adopted and implemented.

3.2 Protocol One—Survey Planning Officials

Surveying planners who use form-based code might appear to be simple. In reality, the task is more complicated. The intent is to begin to establish a database of practitioners who are enacting and using form-based code. The division between “zoners” and “formers” has intensified over the last several years, and it is important to attempt to understand the issues of planners who have specific experience implementing form-based code.

The Protocol One survey is included in Appendix A. The questions respond to the metrics identified in this chapter: (1) contextual factors; (2) adoption decisions; (3) implementation; and (4) outcomes. The survey link was sent to planning officials. The majority of respondents self-identified as planning directors. The communities that were surveyed were determined by using the online published list of 480 communities who are considering, are adopting, or are implementing form-based code, which was

assembled by Hazel Borys and Emily Talen.⁵⁰ The 2013 Codes Study is an online collection of information tracked by academics and practitioners to record the progress of form-based code adoption. It includes “480 codes that meet criteria established by the Form-Based Codes Institute (FBCI), as well as an additional 14 form-based guidelines, 279 of these are adopted, with others in progress” as illustrated in Appendix C. Even though form-based codes are 30 years old, “84 percent have been adopted since 2003” (Borys and Talen 2013). This online list includes the community, year of adoption, acreage, and a summary of the results of implementation, along with an approximate number of residents (Figure 3.2). Contacts for each community are not identified in the online data spreadsheet. The planning official, director or senior planner in each locality was identified by phone or online research to locate their email address. This survey was conducted from November 1 through December 16, 2013, by using the online instrument SurveyMonkey®. The survey was approved by the Georgia Tech Institutional Review Board (IRB) in October 2013. Consent information was not required by the IRB when the mandatory introductory letter was included in the survey (Appendix A).

⁵⁰ Codes Study

http://www.placemakers.com/wpcontent/uploads/2013/05/CodesStudy_May2013_WEB.htm (accessed June 4, 2014).

Title	St / Prov / Co	Largest Scale	Implementation Strategy	Type	Adopt Year	Adopt Date	Acres	Pop.
Abbeville	LA	City		SmartCode	2006	Jun-13	3,648	11,836
Addison	TX	City	District plan with a form-based code to implement the vision and design concepts, and ensure Addison's revitalization and transition from "aging first ring suburb" to "urban mixed use destination".	Other FBC	1995	Jan-95	2,784	14,964
Airdrie	Alberta	City	Mixed Use Centres Design Guidelines	SC & FBC Discussion			8,179	42,564
Albuquerque	CA	Neighborhood	Applies to North Park Street Districts	Other FBC	2012	Dec-13		
Alexandria	NM	City	Optional overlay. Form Based Zones legislation (O-08-58) was passed by City Council with a 7:2 vote	Other FBC	2005	Apr-13	115,584	521,999
Allegan	VA	City	Various FBC urban design guidelines, mandatory by neighborhood	Other FBC	1993	Dec-93	9,728	143,885
Alpine	MI	City		Transect-based			2,432	4,816
Alys Beach	CA	Neighborhood	Mandatory for Alpine Village Core	SmartCode			17,139	14,236
Anherst	FL	City		Transect-based	2003	Jun-13	158	
Antioch	MA	Neighborhood	Failed to pass with required supermajority on November 16, 2011. Under consideration. For two small rural centers.	Other FBC				
Arlington: Columbia Pike	IL	City		Other FBC			4,723	14,430
Arlington: Neighborhoods Form Based Code	VA	Neighborhood	Updated 2/2006	Other FBC	1999	Jan-99	16,640	209,969
Arlington: West Arlington	VA	Neighborhood	Will specifically address the multi-family residential development surrounding the town centers on Columbia Pike. An existing FBC guides development of the town centers. The Neighborhoods Plan FBC External link will offer incentives for development, such as greater density, that provide affordable housing and other community benefits such as streetscape, open space and auto, bike and pedestrian connectivity.	Other FBC				
Asheville	WA	Neighborhood	Mandatory for the West Arlington subarea plan adopted Feb. 7, 2011. Includes TDRs.	Other FBC			4,864	17,926
Atlanta	NC	Neighborhood	Applies to Haywood Road	Transect-based				
Atlanta: Doraville TOD	GA	City	Mandatory neighborhood codes; plus floating zones city-wide	Other FBC	1999	Jan-99	84,352	537,958
Atlanta: Edgewood TOD	GA	Neighborhood		SmartCode				
Aurora	GA	Neighborhood	Applies to TOD; implements the ARC and the Southface Energy Institute plan	SmartCode				
Austin	IL	Neighborhood	Adopted FBC and an alternative energy ordinance that establishes requirements and streamlines the process for property owners installing solar and wind energy systems within the city.	Other FBC	2012			

Figure 3.2 Codes Study Screen Shot

Source: Borys, Hazel, and Emily Talen. 2013. The Codes Study. PLACEMAKERS 2013, http://www.placemakers.com/wp-content/uploads/2013/05/CodesStudy_May2013_WEB.htm (accessed September 15 2013).

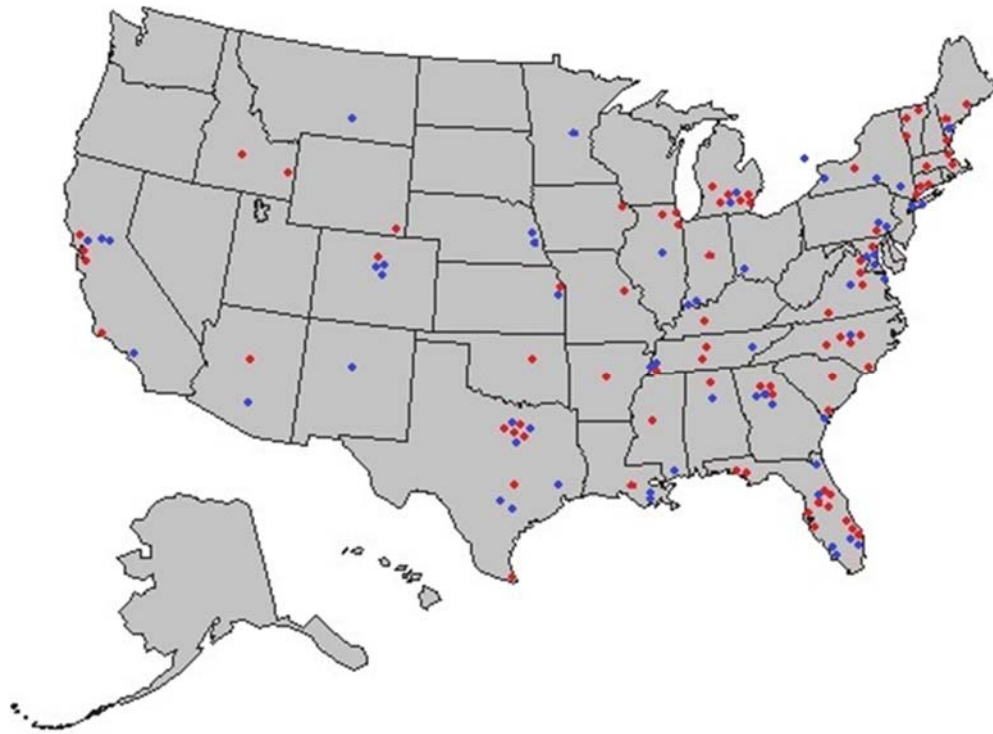


Figure 3.3: Geographical Locations of Survey Respondents

The survey was designed through discussions with public and private sector planners. It was pretested, after preparatory research on how to prepare online surveys. The list of 480 communities was reduced to 428 when the following were removed: locations outside the United States (11); locations where it was difficult to obtain contact information (25); email addresses that bounced back (9); and, those who opened the email and selected to opt out of the survey (7) (Figure 3.3).⁵¹ The response rate is 31.7 percent, 136 responses, which is considered average for web-based surveys according to

⁵¹ Figure 3.3 differentiates planning directors' locations in red and other respondents' locations in blue in the geographical locations map.

the University of Texas at Austin Instructional Assessment Resources.⁵² Several sources state that while 30 percent is average for web-based surveys there are ways to enhance response rate by sending letters, phoning, emailing reminders, and personally inviting respondents to participate by using extensive follow-up techniques (Kaplowitz, Hadlock, and Levine 2004, Nulty 2008, Keusch 2012). This research is based on responses given by volunteers and did not employ additional techniques other than the original email and one follow-up email two weeks later.

3.3 Protocol Two—Cincinnati, Denver, and Miami Case Studies

These studies augment the survey data and identify specific issues that communities encounter when changing to form-based code. The three cities selected have introduced and adopted form-based code and are in the process of implementing it. The geographic diversity of these cities in the Sunbelt, rustbelt and the west give a broad national view. Additionally, the cities studied have comparative economic diversity: Miami's hyper-development economy contrasts with Denver's quest for growth and Cincinnati's desire for development.⁵³ Research and personal interviews with planning officials provide an understanding of the specific process and include their vision, expectations, motivation, and perceptions of what advantages and setbacks they have or will encounter in implementation, as listed in Table 3.2.

Rogers' "diffusion of innovation" (2003) describes what motivates leaders—specifically, how change and ideas move through culture. This theory is an essential

⁵² "Assess Survey Response Rates." Instructional Assessment Resources, University of Texas at Austin, <http://www.utexas.edu/academic/ctl/assessment/iar/teaching/gather/method/survey-Response.php> (accessed November 14 2013).

⁵³ Time lines for each city's process are provided with the case study.

component of the case studies. Research regarding existing conditions and motivations are essential to understanding the process and expectations in Cincinnati, Denver and Miami.

Cincinnati is adopting their form-based code in a piecemeal fashion, obtaining approval neighborhood by neighborhood. The city is in the process of adopting the new code by enacting legislation for four neighborhoods, which occurred throughout 2013 and continues in 2014. Additional neighborhoods may be added depending on the changing political climate and funding. Denver has a hybrid code, with overlay districts for implementing form-based code in specific locations. A hybrid code is defined as a “meshing of conventional zoning codes with graphic urban design standards that typically address setbacks, parking placement, building bulk, materials, and architectural features.”⁵⁴ Denver approved their city-wide code in 2010. Miami 21 is the first city-wide code, but has included four special districts, three of which were in place prior to form-based code adoption. Miami’s new city-wide code was adopted in 2010. The information that is included for each city study is listed in Table 3.2.

⁵⁴ Hybrid codes, [http://www.formbasedcodes.org/files/Hybrid_Codes\(2\).pdf](http://www.formbasedcodes.org/files/Hybrid_Codes(2).pdf) (accessed December 15, 2013).

Table 3.2 Information Identified Through Case Studies

CITY DESCRIPTION	A history of planning issues in the city including summary of population, development patterns, and transportation.
ROLE OR HISTORY OF ZONING IN CASE STUDY CITY	Review the city's history of zoning successes and failures, the public process, the issues that changing to form-based code expected to address and the implementation process.
IDENTIFY THE PROCESS AND IMPLEMENTATION FOR FORM-BASED CODE	Discussion of the issues implementing form-based code by city including: (1) contextual factors; (2) adoption decisions; (3) implementation; and (4) outcomes.

CHAPTER 4

PROTOCOL ONE--SURVEY OF PLANNING PROFESSIONALS

This survey of planning officials using form-based code includes communities from the list provided by Hazel Borys for *The Codes Study*.⁵⁵ This online database tracks form-based code adoption throughout the United States (Borys and Talen 2013). *The Codes Study* states that over 84 percent of the 279 form-based codes have been adopted since 2003. Code adoption began in 1982. Survey respondents are generally favorable to the outcomes of the code change, which reflects a clear response bias in that their communities are listed in the codes study website as having adopted the code. These respondents relate an optimistic view of form-based code and express anticipation that the new code will precipitate good design, quicker approvals, and more and better development.

As discussed in Chapter 3, the targeted response pool (and, consequently, the respondents) primarily consists of planning directors and senior planners with experience in writing, adopting and advocating for form-based code. They are, for the most part, supporting the change in their communities, although many have little to show for their effort to date due to the slow-down of development since the Great Recession and subsequent poor economic conditions. Detailed review of the outcome of the survey follows in this chapter.

⁵⁵ *The Codes Study* database can be accessed at <http://www.placemakers.com/how-we-teach/codes-study/> (accessed September 6, 2014).

4.1 Position and Zoning Experience of All Respondents

Of the total 136 respondents, 57.0 percent (77) self-identify as planning directors; 31.1 percent (42) as public sector planners; 23 percent (31) as public officials such as environmental, community and economic development managers; 7.4 percent (10) as private sector planners (Figure 4.1); and 0.7 percent (1) elected official.⁵⁶

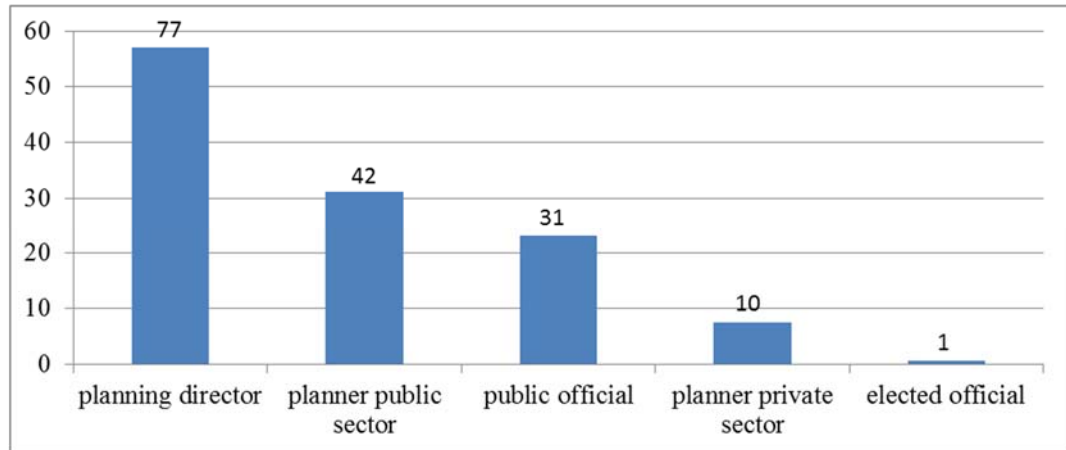


Figure 4.1 Percentage of Respondents Who Self-Identify Their Position

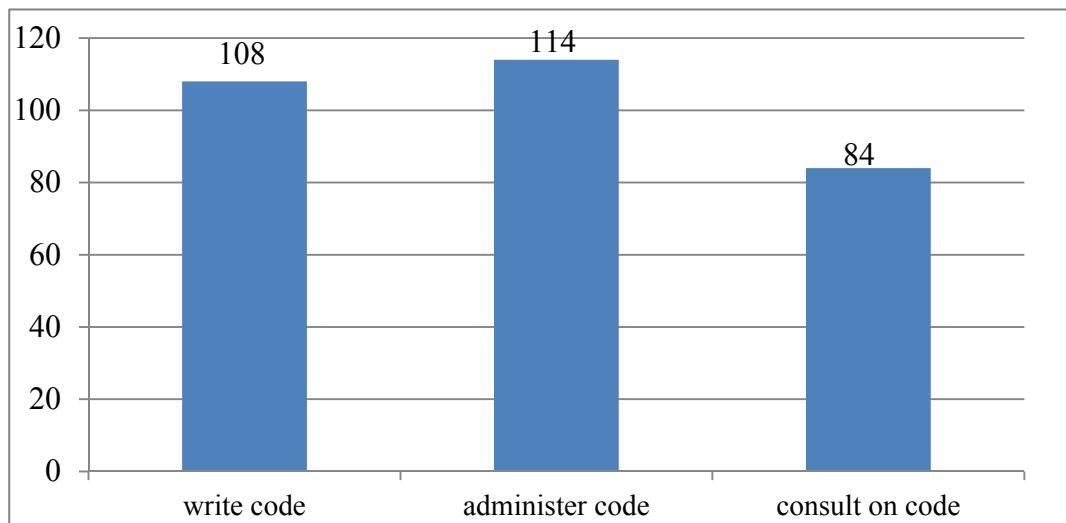


Figure 4.2 Zoning Experience of Respondents

⁵⁶ Figures in Chapter 4 by author. Results of survey are reported as percentages with the total number in parentheses, such as 21.5 percent (29). Percentages are represented on Y-axis in all figures. The actual number is noted above the bar on charts.

As shown in Figure 4.2, a high percentage of respondents are experienced with code work, with 80 percent (108) writing code, 84.4 percent (114) administering code, and 62.2 percent (84) consulting on code, indicating an experienced group of practitioners as the respondents of this survey. Additionally, as shown in Figure 4.3, a high percentage of the respondents—85.9 percent (116)—self-identify as planners: 21.5 percent (29) as urban designers, 7.4 percent (10) as landscape architects and 5.9 percent (8) from the legal profession. Others included environmental planners, engineers, city managers and activists, totaling 11.1 percent (15). Respondents were asked to check as many professions as applied to their circumstance.

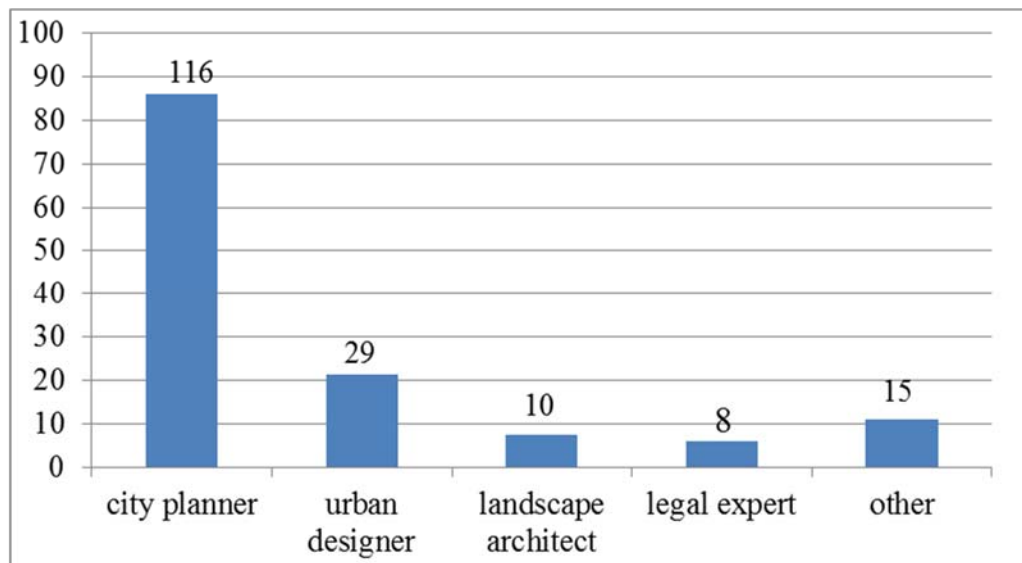


Figure 4.3 Percentage of Respondents' Self-Identified Professions

4.2 Form-Based Code Experience and Status in the Respondents' Community

Use of the *Codes Study* data ensured that a high percentage of respondents would be experienced with form-based code, as their communities have implemented it or are in the process of adoption. Respondents who designed or assisted with writing the code include 39.4 percent (52) and 65.9 percent (87) respectively, as shown in Figure 4.4. Representative comments include: “Currently reviewing several new projects based on our new FBC,” and “I have also completed the FBCI Certificate on Form-Based Codes.” Advocates for code change included 51.5 percent (68); a small percentage of respondents—3.9 percent (5)—reported resisting the code change, as shown in Figure 4.5. Of the 27 recorded comments, 77.8 percent (21) of the participants commented that they continue to work with form-based code in areas of their community. Two respondents express negative views of the code, including one who states that “the form-based code is stupid.”



Figure 4.4 Percentage of Respondents with Direct Experience with Form-Based Code

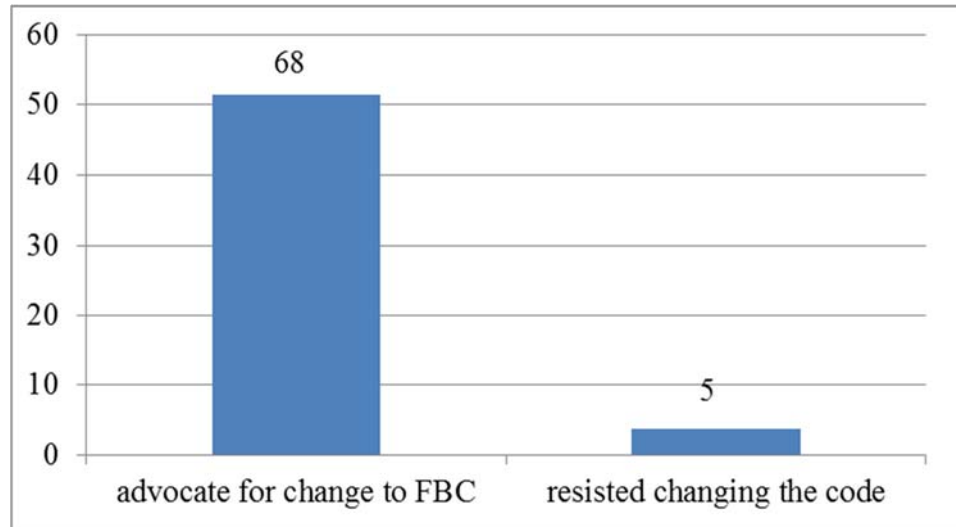


Figure 4.5 Percentage of Respondents who Advocated or Resisted Change to Form-Based Code

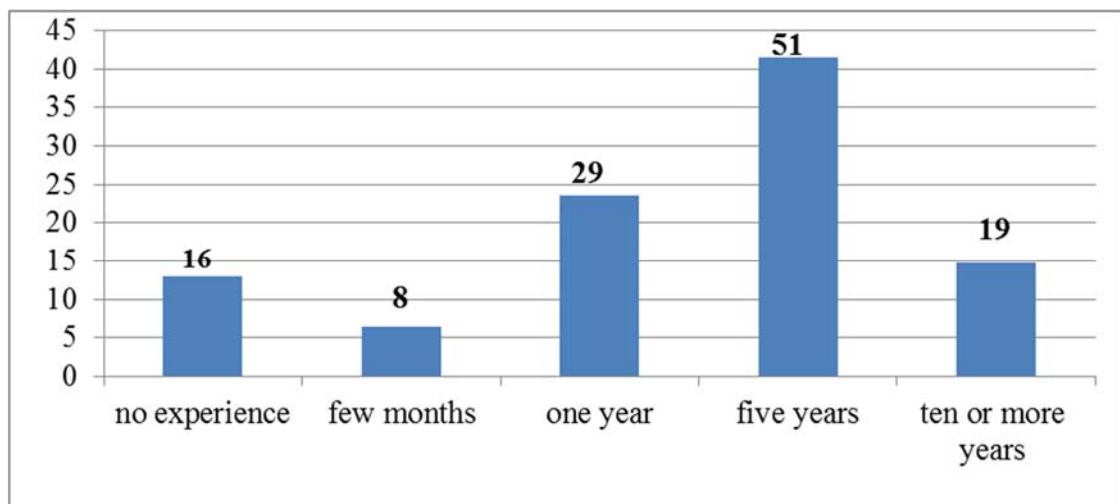


Figure 4.6 Percentage of Respondents' Length of Experience with Form-Based Code

The respondents' length of time working with form-based code varies: 23.6 percent (29) with one year of experience, 41.5 percent (51) with five years, and 14.3 percent (20) with ten or more years' experience working with form-based code, as illustrated in Figure 4.6. One respondent had over 15 years of experience, while 13 percent (16) have not worked with form-based code and 6.5 percent (8) had only a few

months experience (Figure 4.6). Written responses included those who stated they did not understand or want a code change, and several who were just beginning to learn about form-based code by taking a class online or searching the web.

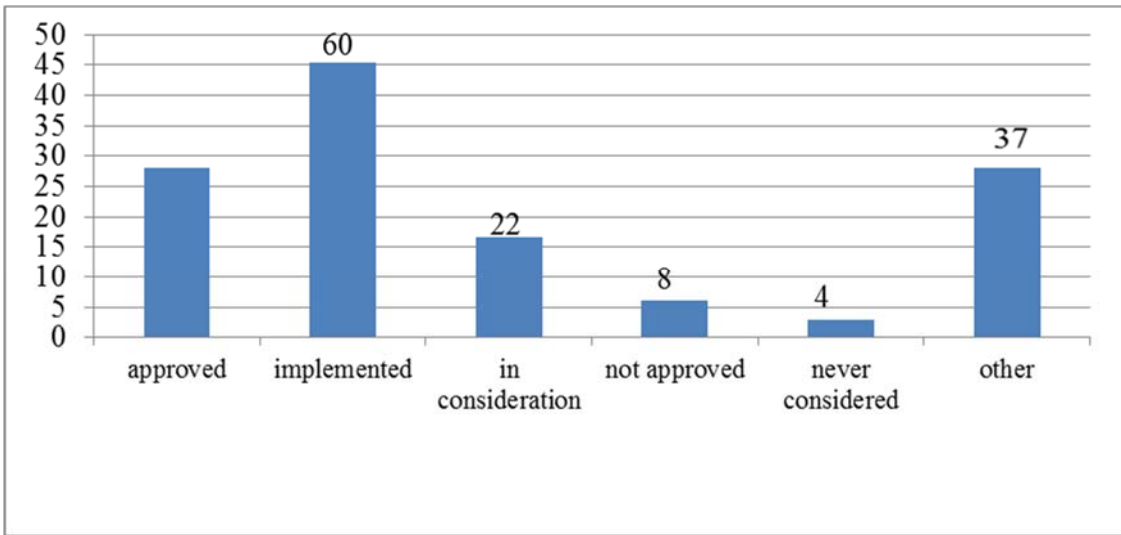


Figure 4.7 Percentage of the Status of Form-Based Code in Respondents' Communities

Code change is being implemented in 45.5 percent (60) and approved, but not yet implemented, in 28 percent (37) of respondents' communities. Of the communities that are considering a code change, 16.7 percent (22) are considering change, six percent (8) chose not to approve, and three percent (4) never considered a code change (Figure 4.7). Of the 37 respondents' written comments, 18.9 percent (7) note that their communities adopted a hybrid code and 24.3 percent (9) adopted a partial code. One small town respondent commented "Hybrid with Euclidian zoning and FBC in special areas" and another from a small Southern city "Under consideration—a form-based code hybrid."

4.3: Adoption: Who are the Leaders and How Long Did it Take?

An important question about implementation is: Who advocated for and is considered the principal leader for change? Some bias may be present as the survey is directed toward planning officials and, as illustrated in Figure 4.8, the respondents state that planning officials are most often the change leaders (with 55.3 percent [73]). Interestingly, recorded responses include that among the leaders identified as “other,” 41.7 percent (55) are groups such as city councils, county commissions, economic development councils, city and county managers, and private sector developers. The developers cited concerns about specific development parcels (one identified as having a 300-acre site in a Dallas suburb) as the reason driving the code change. Planning consultants are the third most-mentioned leaders at 23.5 percent (31).

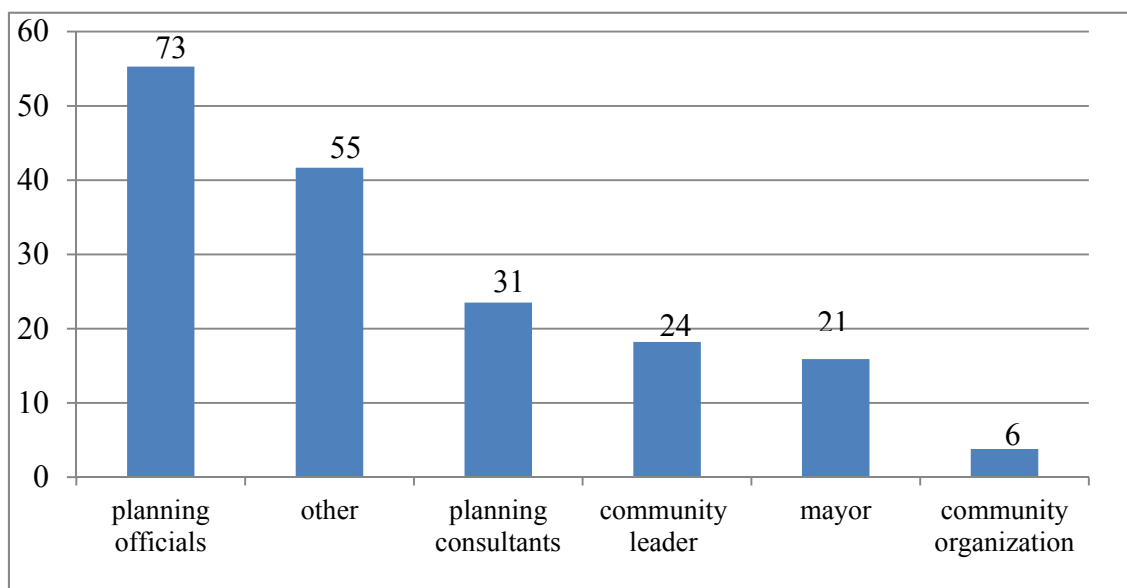


Figure 4.8 Leaders of the Change to Form-Based Code

Local community leaders are responsible for the change according to 18 percent (24) of respondents. Mayors are the change leaders in 15.9 percent (21), and community organizations led the change movement in four percent (5) of cases.

Respondents were asked to name or describe the person responsible for changing the code, and 101 of those surveyed listed a position or a specific name. The planning director, planning consultants and staff were primarily identified as the leaders, followed by the mayor and city council (Table 4.1).

Table 4.1 Named Change Leaders

Position responsible	Times mentioned	Percent of Respondents
Planning director	16	15.8
Planning consultant	16	15.8
Staff	16	15.8
Mayor	15	14.9
City council	9	8.9

Source: by author

Two years is the average time for the communities to implement the code change. 46 written comments were recorded, ranging from “not complete” to “has evolved over a ten-year period.” As illustrated in Figure 4.9, change appears to take an extended amount of time that is spent discussing, negotiating with, and educating the community. Adoption time for form-based code varies between six months and five years, with four direct responses noting a more than 10-year time frame. A two-to three-

year time frame appears to be the median with 31 percent and 25 percent reporting six months to one year.

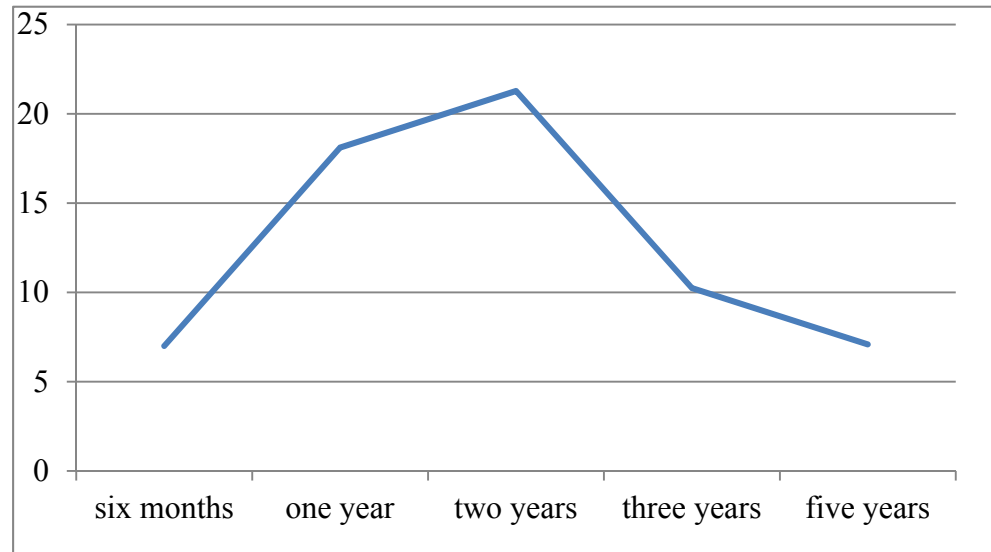


Figure 4.9 Respondents Report Length of Time to Enact Form-Based Code.

4.4 Amount of Discussion Regarding Change to Form-Based Code

Respondents were asked to describe the amount of discussion time that the community engaged in prior to changing the code. The answer varied from 74.6 percent (97) of respondents, who said that there was a lot of discussion, to less than 9.2 percent (12) of the respondents, who said there was not much discussion (Figure 4.10). When asked to describe the community discussion, 102 respondents listed various aspects of the change to form-based code that were very time-consuming. Judging by the 122 recorded written comments, this question generated the most discussion. To attempt to summarize individual quotes from the planners would not be representative of their personal comments, which are listed in Table 4.2.

Table 4.2 Survey Respondents Comments Describe the Community Discussion

<p>“Two years of educating elected officials and staff, one year of public input, code development and adoption discussion.”</p>
<p>“What should the design standards be: how would the new code apply to existing lots and structures; which land uses should be permitted; how much authority should be given to staff for administrative approvals vs. the Commission?”</p>
<p>“Lots of confusion initially as to what it was; lots of apprehension over <i>losing control</i>.”</p>
<p>“There was a monologue. I did not like how the African-American community was handled by the outsiders advocating form based codes. As an African-American planner I felt that both I and my communities concerns were swept under a rug. I pointed out errors that never were corrected. Those errors led to the repeal of the form based codes in my section of the city.”</p>
<p>“Writing the Form-Based Code (FBC) for the Central Business District (CBD) was easy. There was a clear context -- early 20th century buildings, 1-2 stories in height, mostly brick. We didn't even call the new code a FBC, but it certainly was. There was such an obvious architectural character to the CBD that there was almost no controversy. FBC in South Downtown was an intense but civil conversation with owners of property within the FBC area (primarily student apartment rental companies) and single family residential people adjacent to the FBC area. Not very controversial outside the immediate area. FBC on Main Street was a huge controversy spanning multiple years. It happened in the height of the Tea Party movement locally and took on a life of its own. The Main Street corridor was very long (5 miles) and had no real discernible character. It was hard to explain it to the public based on the size and complexity of the code. I would say the discussion was very negative. We ended up adopting FBC as an optional code.”</p>
<p>“Varies. Neighborhood groups usually take lots of calming down before they will be open to even listening and becoming educated on the topic. Negotiation on every minor detail takes lots of time and this makes the code long and complicated.”</p>
<p>“Initially it was heated. However after a near one million square foot big box development proposal (failed) the discussion was refocused on the Town Center where I saw a chance to renew the discussion in a much more positive way.”</p>
<p>“Great deal of back and forth, and ultimately the politicians did not want to relinquish so much control.”</p>

“Thousands of hours of meetings to build consensus. [Thousands] is the correct number”
“Council staff pitching the idea to citizens, neighborhood association representatives, property owners, and business owners. Lots of resistance to change.”
“What is this new thing? Why do we need it? What will the impact be on existing zoning?”
“Varies. Neighborhood groups usually take lots of calming down before they will be open to even listening and becoming educated on the topic. Negotiation on every minor detail takes lots of time and this makes the code long and complicated.”

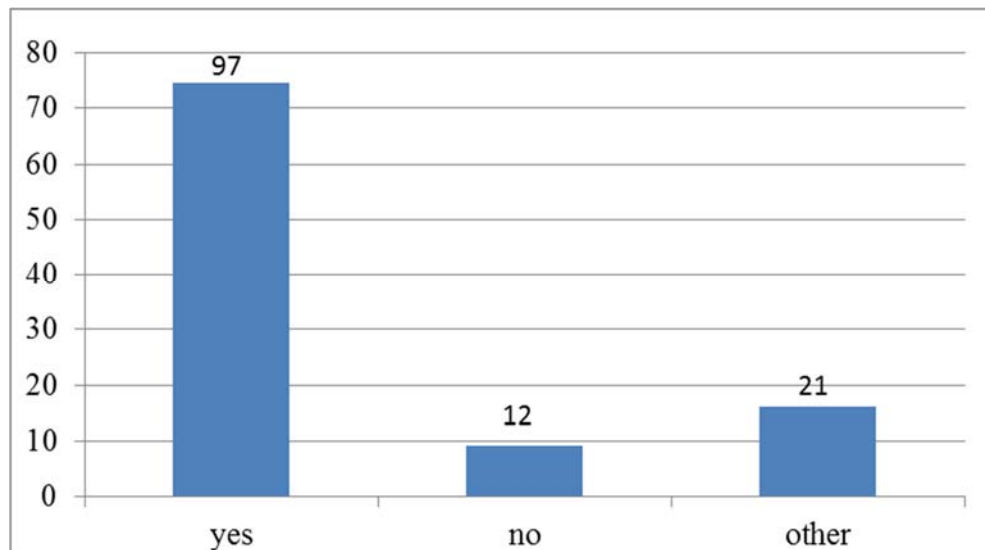


Figure 4.10 Percentage of Respondents’ Opinion when Queried about Amount of Discussion Regarding the Change to Form-Based Code

4.5 Is Form-Based Code Achieving its Intended Goals?

A combined 56 percent (45) believe their form-based code is achieving what was intended as is excellent and working well. Form-based code has not produced much change for 24 percent (19) of the respondents, and the remaining 15.2 percent (12)

responded that there are problems, while 10.1 percent (8) believe it is not working (Figure 4.11). The consensus (57 of the 64 written responses) is that they are not yet convinced that form-based code is a success or that it is producing change. Reasons for this include the economic downturn caused by the Great Recession and the resulting slow start up of new and redevelopment projects as well as the slowdown of permitting and construction in their communities and unfamiliarity of working with the new code. Representative comments from the list of 64 comments are listed in Table 4.3.

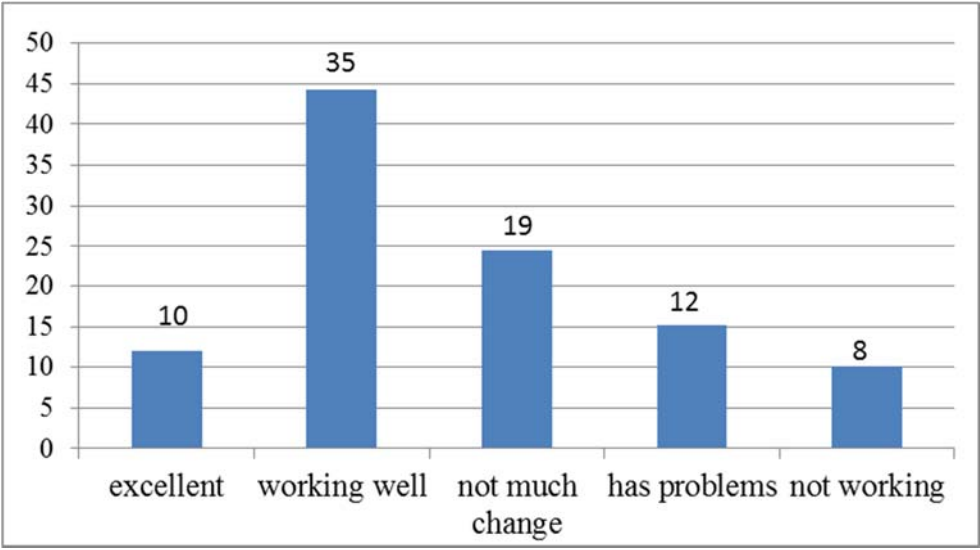


Figure 4.11 Respondents Report how Form-Based Code is Working in Their Communities

Table 4.3 Respondents Describe How Form-Based Code is Working

“Due to the economic slowdown no development has occurred since adoption.”
“Development has not recovered from recession yet. Progress is slow, but is picking up”
“Early attempts fizzled; recent cases have been delayed by downturn in economy.”
“Not implemented yet.”
“In development. So the jury is out.”
“The code is very new and there are having been no major projects yet to really see how it will work. It is moving slowly. It is complex to administer as well, as so staff are still trying to understand it and become familiar with it.”
“Review staff still refers development plans to the planners who worked on the code. They do not feel comfortable with it yet.”
“Very little change at this point, but expect more.”
“It helps foster NYMBYism (not-in-my-backyard).”

4.6 Effect of Form-Based Code on Time, Cost and Community Interaction

Table 4.4 shows the percentages and numbers of respondents to the question regarding the amount of time, cost and community interaction that is needed for form-based code to replace Euclidean zoning. Additionally, respondents recorded 57 comments, and among those 35 percent stated it is too early to determine if **more** or **less time** is needed for development approvals. This is primarily due to having not yet completed the work on their form-based code, or because it is too new or too soon to determine time issues. Comments included: “no real experience yet;” “Cannot yet evaluate this;” and “Code hasn't been implemented yet.” In regard to cost, time, and public process, one participant’s comment is representative of several of the responses. It appears politics is a continuing issue with current zoning:

“While I would say (there has been) no impact since the FBC (form-based code) has not been used, it was designed to significantly reduce cost and time. One of our biggest issues in the zoning ordinance is the very direct role the elected officials can, and do, play with regard to oversight of individual development projects.

Table 4.4 Outcomes Reported Regarding Time, Cost and Amount of Public Process

	More	Less	No Impact	Number of Respondents
Time needed for rezoning	28.4% (23)	25.9% (21)	45.7% (37)	81
Cost to rezone	29.6% (24)	25.9% (21)	44.5% (36)	81
Public process to rezone	34.6% (28)	24.7% (20)	40.7% (33)	81

4.6.1 Time

Survey results for this research are split almost equally between **more** or **less time**, with respondents noting that 28.4 percent (23) are spending **more**, and **a lot more** time, with form-based code. Of the 81 respondents to this question, 25.9 percent (21) believe they are spending **somewhat less** or **much less time**. More significant is that 47.7 percent (37) note that the change to form-based code has had **no impact** with regard to the time planners are spending to implement code.

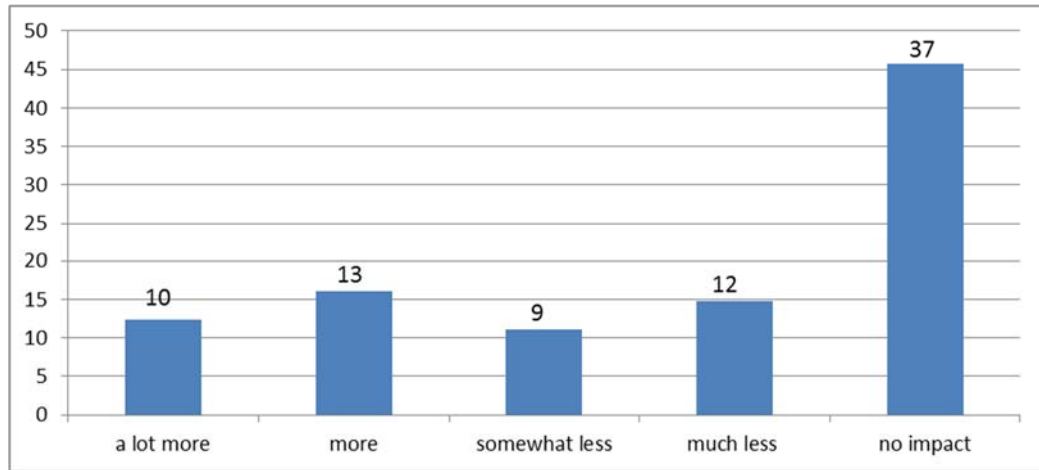


Figure 4.12 Outcome of Time Change Attributed to Adoption of Form-Based Code.

Of the 57 recorded comments, eight specifically mention time as an issue. For example: “The major change, specifically for the development community, is that our UDO (urban development ordinance) allows many more uses by right, which greatly reduces the amount of time necessary to gain development approval in most cases.” Several planners are looking for time savings; they specifically want a shorter time period for permitting. Respondents understand that “easier” permitting is directly correlated to their goal to save cost and time to respond quickly to developers and to the community.

4.6.2 Cost

As identified in Table 4.4 and Figure 4.13, 29.6 percent (24) of respondents state that **more** and a **lot more** cost is attributed to the change to form-based code.

Somewhat less and **much less** cost was identified by 25.9 percent (22) of respondents.

As with the previous time-related query, the selection of **no impact** is higher at 44.4 percent (36). Of the five comments regarding cost, the respondents characterize the

adoption of form-based code as anticipating it will save time and cost, and so they are looking to future savings. The intent to make the zoning process more streamlined is anticipated by the community. One respondent commented: “If a case is filed, the cost and time for community interaction remains the same, as mandated by our fee schedule and [Arizona] state law. To date, there is no appreciable impact in regard to cost.”

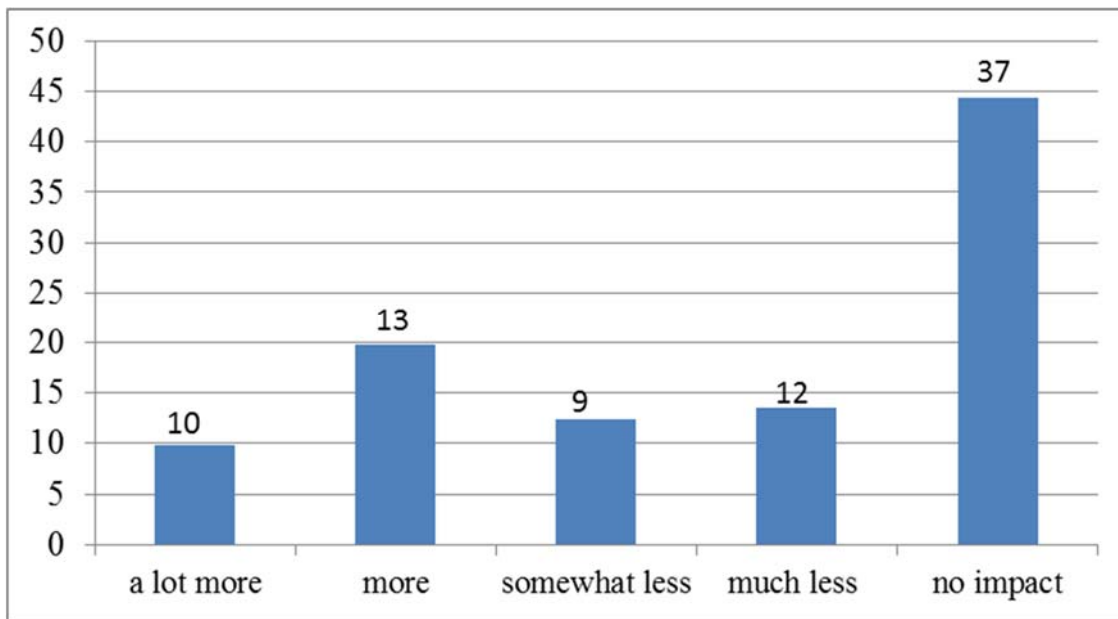


Figure 4.13 Outcome of Cost Change Attributed to Adoption of Form-Based Code

4.6.3 Community Interaction

Figure 4.14 illustrates that regarding community interaction, 40.7 percent (37) identified **no impact**. **More** or a **lot more** interaction is reported by 34.6 percent (23) of the respondents, while **somewhat less** and **much less** is noted by 24.7 (21) percent of respondents. One respondent stated that:

“The major change, specifically for the development community, is that our law allows many more uses by right, which greatly reduces the amount of time

necessary to gain development approval in most cases. This expedited process does reduce the public process and citizen interaction for development approvals as projects that are permitted by right do not have to go before any public boards or have a public hearing.”

The issue mentioned in several previous responses is that planning officials are granted more overview and more decision making, and as a result more power due to the change to form-based code. Planning officials make their decisions and approvals by permit (warrants), and the community has agreed in advance to accept those decisions as previously discussed and accepted in the form-based code without further discussion or a vote by elected officials.

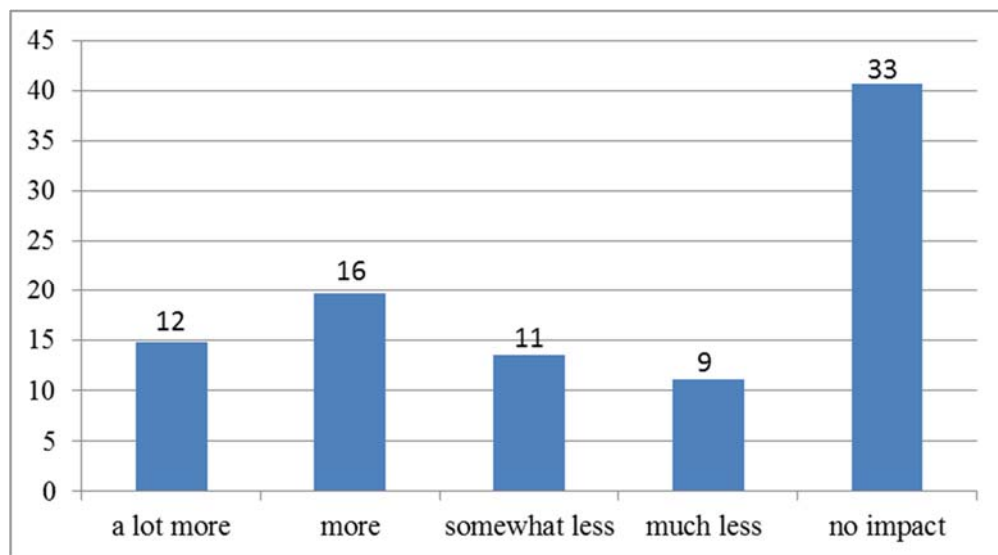


Figure 4.14 Percentage of Responses of Community Interaction Change Attributed to Adoption of Form-Based Code

4.7 Four Outcomes Respondents Expected from Form-Based Code

Respondents were asked to name and rank the four outcomes they expected to see as a result of the change to form-based code. **Development** was named first in each of the four outcomes, with **design** listed second of three outcomes (Table 4.5). **Process**

and **approvals** are also listed, but are not priority outcomes of the change to form-based code. **Process** is listed in three outcomes. As illustrated in the word map, Figure 4.15, respondents are clear on their goals for form-based code: **development and design**.

Table 4.5: Respondents Expected Outcomes of Change to Form-Based Code

First outcome (101 responses)	%	Second outcome (96 responses)	%	Third outcome (86 responses)	%	Fourth outcome (72 responses)	%
Development	20.8	development	17.7	development	19.8	development	13.9
Design	9.9	design	10.4	design	9.3	approvals	8.3
Pedestrian	6.9	process	7.3	process	7.0	Increased potential	5.6
Predictability	5.9	land	6.3	mixed	5.8	design	4.2
Process	5.9	walkable	6.3	neighborhood	5.8	land	4.2



Figure 4.15 Word Map of First Outcome Comments by Respondents

Development

Of the total 101 responses regarding the expected outcomes, development ranked highest out of the four. Respondents' answers included 67 comments referencing an expected outcome of an anticipated increase in new and redeveloped projects in the communities they represent. Respondents often expressed the hope that new, flexible, vibrant, and quality growth will encourage development. Specific and characteristic remarks include: "Quality development based on customized zones that emphasizes development form, character, and function," and "Foster[ing] development of a vibrant mixed-use district with a cohesive street layout and architectural character that includes commercial, residential, and civic uses, and integration of open spaces, transit, bicycle, and pedestrian accommodations." Adjectives such as "orderly," "denser," "more transitional," and "unique," were used to describe development.

Design

"Better," or "flexible design," along with "easier permitting" were mentioned most often along with "design" in each of the four outcomes. "Walkability" and "improved design" were used to describe what the planners hope to achieve with their new code. Adjectives such as "improved," "sustainable," "higher quality" and "pedestrian friendly" were often used to describe design intent. Building and landscape design was mentioned by 15 respondents as important to overall good design. One respondent, a private sector planner working as the planning director in a small northeast town, noted their city was looking for a "consistent approach to design on historic examples in urban neighborhoods."

Process

The comment “greater clarity and predictability for code users” summarizes the 20 comments from respondents that mentioned ease of process resulting from the change to form-based code. Respondents expressed comments such as “quicker,” “faster,” “efficient” and “expedited” to describe their new process. One respondent, from a small town in New England, expressed “difficulty with the new zoning.” Another planner from the same location commented that the new code “recreated much more transparency and trust in the process,” citing this as the primary reason the community supported the change to form-based code.

Approvals

The fourth response included six comments referencing approvals. The respondents noted that approvals are “easier,” “shorter” “smoother” and “transparent.” “Development approvals [are] fair, [and] cost effective by right” is the comment from the planning director in a Midwestern city. The planning director in a large Southern city stated that the new code requires “more administrative, rather than legislative, approval authority.” Approvals are not mentioned as a priority by respondents for the first three outcomes. It is not until the fourth outcome that approvals becomes important as an outcome.

4.8 Are Expectations Met?

Respondents were asked if their expected outcomes are met. Of the 37 responses, 75.7 percent (28) answered that it is too early to determine results. One respondent suggested: “This survey will be more useful to you in about another year, after both

municipalities have some experience in administering it. I'm sorry not to have much more to report.” Several responses attribute the limited development to the effects of the Great Recession. Representative comments are listed in Table 4.6.

Table 4.6 Respondent Comments Regarding Expectations from Change to Form-Based Code

“Because of market conditions and the recent adoption of the other code, we have not seen significant results from the adoption of the FBC.”
“Still under development, so far, there are positive signs.”
“Too early to tell.”
“The amount of development/redevelopment has not been significant enough as of yet to draw a conclusion on any of the four outcomes.”
“Because of the five year (plus) downturn in real estate markets, many of the outcomes have been masked.”
“Our zoning change occurred in 2009 so due to economic conditions, it is difficult to determine the true impacts of adopting a form based code.”
“Our codes were adopted in 2008 and results have not been fully achieved yet.”

4.9 Comparison of Planning Directors with All Respondents

Planning directors include 57.04 percent (77) of the total respondents (136); accordingly, it is of interest to compare their responses to the total as illustrated in Figure 4.16.⁵⁷ An expected outcome of this comparison is that planning directors are in agreement with the total pool of respondents. Noted in the results is that there is a four percentage point difference, with 9.72 percent (7) of planning directors and 13.01

⁵⁷ This series of line charts illustrate the comparison of planning director respondents in dashed or red lines and the total respondents in solid or blue lines.

percent (16) of total respondents with no experience with form-based code. There are 27.78 percent (20) planning directors and 23.58 percent (29) respondents with one year experience. A few years, five years, or ten years of experience have less than two percentage points' difference between planning directors and total respondents.

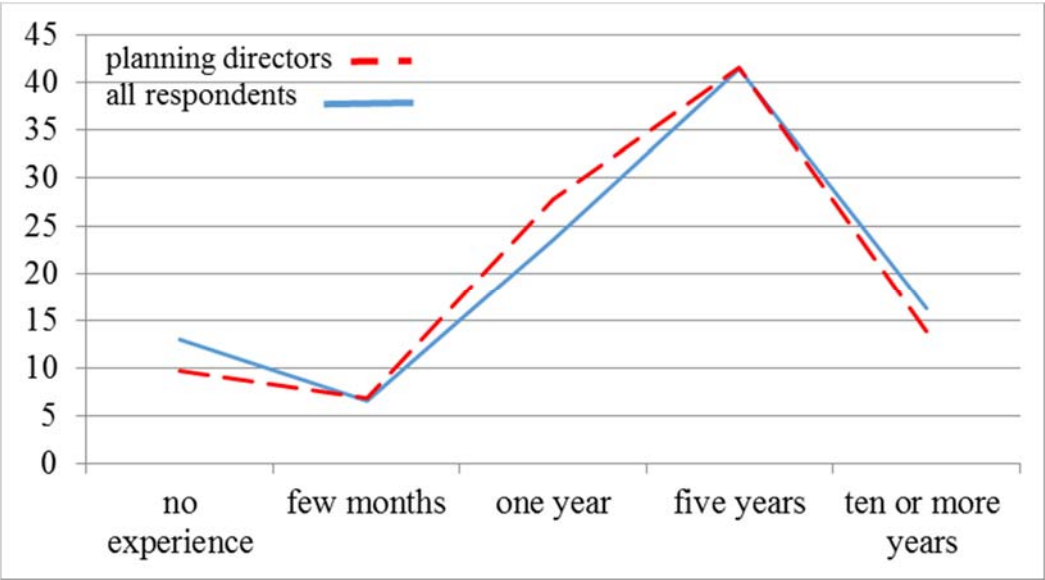


Figure 4.16 Zoning Experience of Planning Directors and All Respondents

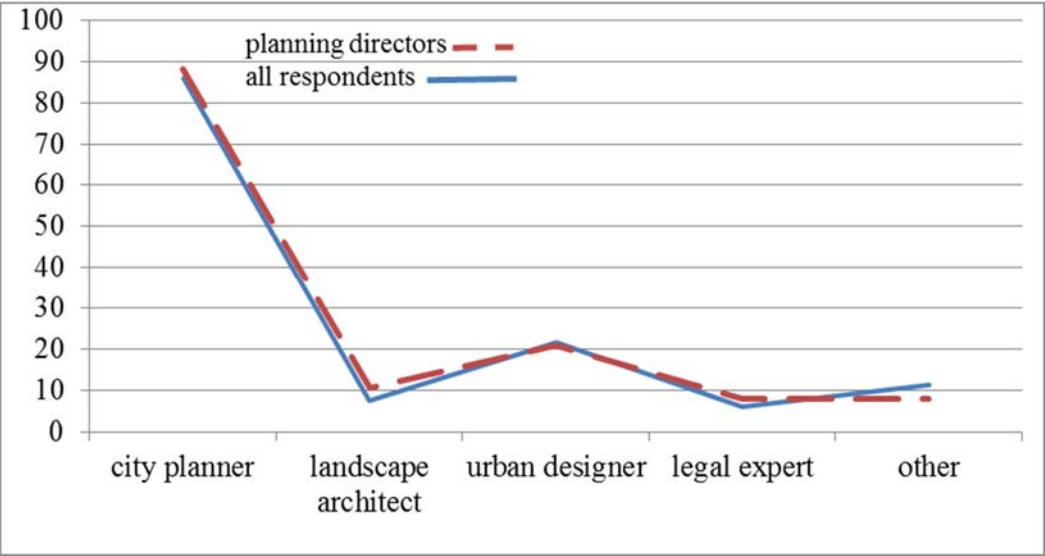


Figure 4.17 Percentage of Planning Directors' Self-Identified Professions Compared to All Respondents

City planners are the highest percentage of planning director respondents at 88.3 percent (68), and are 85.9 percent (116) of the total survey respondents. The percentages of self-identified professions mirror the total survey in Figure 4.17. Regarding form-based code experience, the difference is minimal for one year, with planning directors having 27.8 percent (20) compared to total survey respondents with 23.6 percent (29), as illustrated in Figure 4.18.

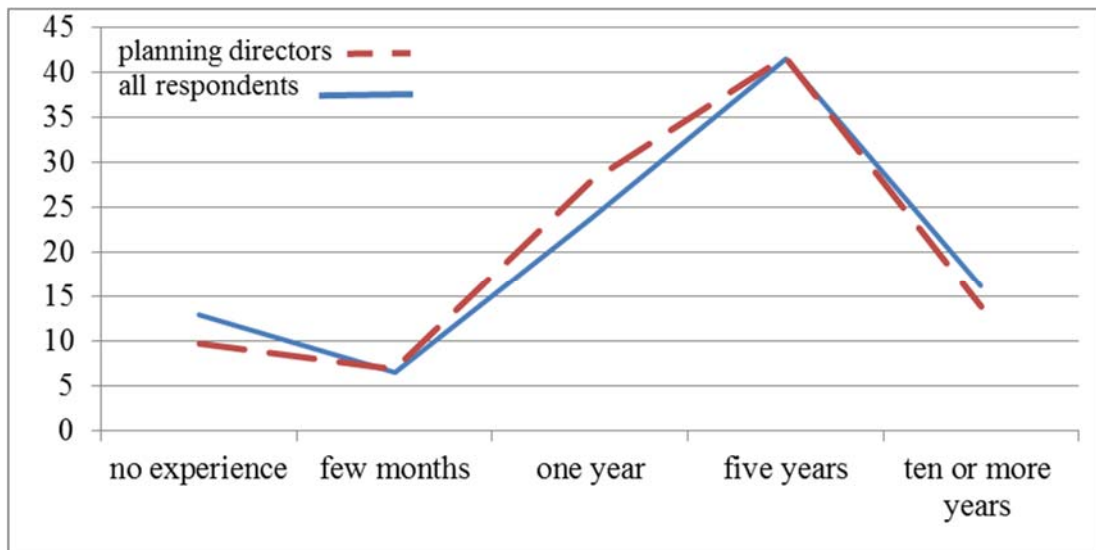


Figure 4.18 Comparison of Planning Directors to Total Survey Respondents' Length of Experience with Form-Based Code

Planning directors report that leaders of the change to form-based code are planning officials by 54.7 percent (41), responses similar to those given by the total survey participants as illustrated in Figure 4.19. Planning consultants were given less credit as the change leaders by planning directors, with 16 percent (12). The total respondents, 23.5 percent (31) noted that planning consultants were more likely to lead the change to form-based code, as illustrated in Figure 1.9. Nine responses from the total surveyed noted that developers were the leaders with the change to the new code.

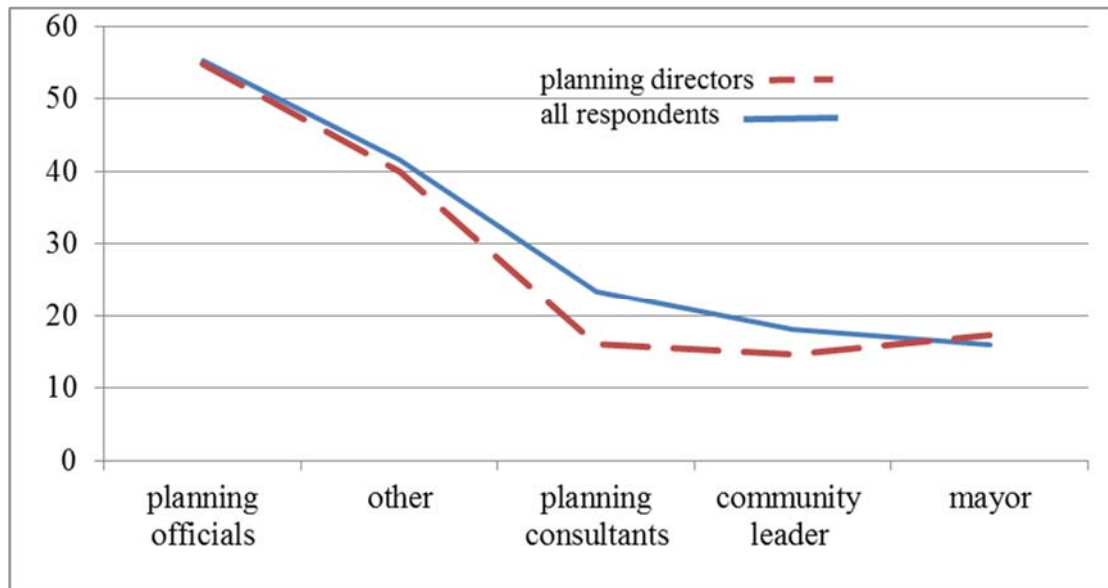


Figure 4.19 Comparison of Responses Identifying the Leader of the Code Change from Planning Directors and All Respondents

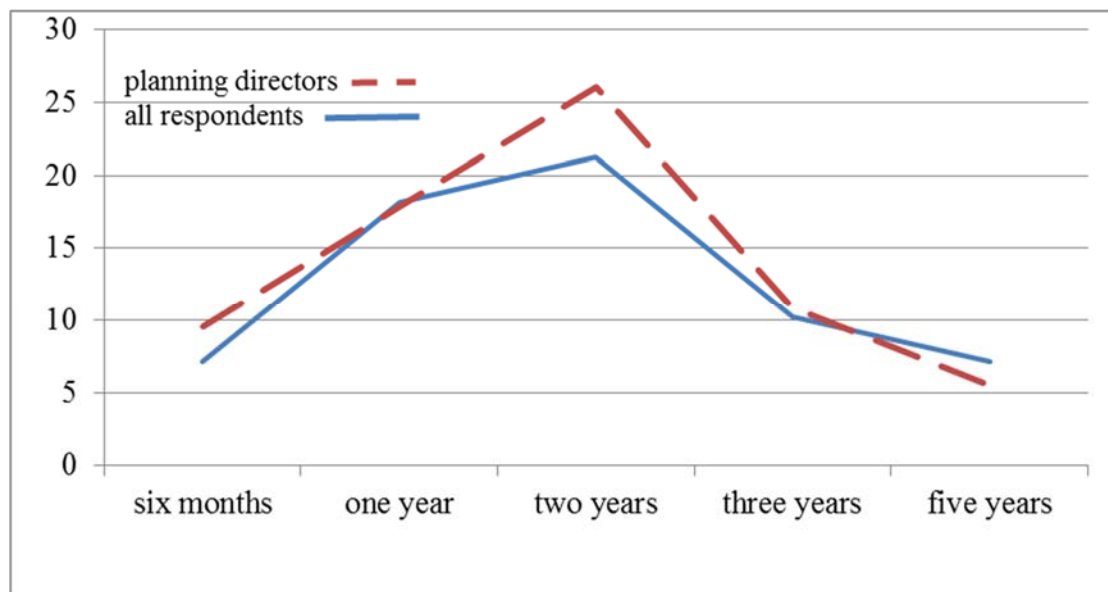


Figure 4.20 Comparison of Planning Directors and All Survey Respondents Regarding the Length of Time to Change to Form-Based Code

Planning directors reported a 4.8 percent higher approval rate in the two year time frame in response to the question how long did it take to approve the new code as shown in Figure 4.20.

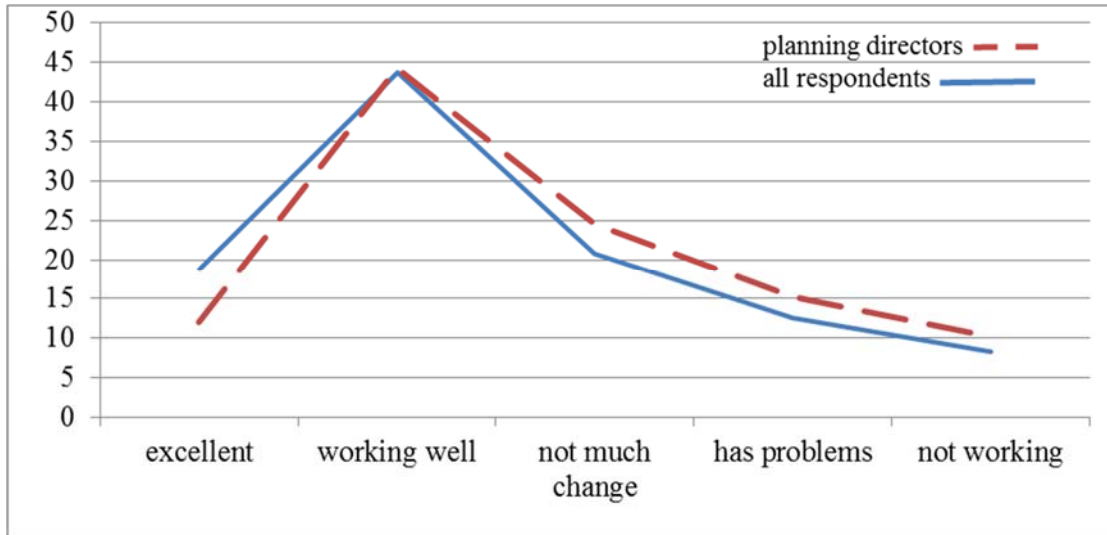


Figure 4.21 Based on Experience is Form-Based Code Working as Envisioned Comparison of Planning Directors and Total Survey Respondents

Planning directors believe that form-based code is working well but has some issues as illustrated in Figure 4.21. Out of 34 comments by planning directors, each of the 34 said it is too early to assess the performance of the code. Typical comments include: “Still in early stages—too early to tell” and “It seems to still be bit too early to tell. The economy needs to improve more so that a few large-scale redevelopment projects can be built to the new code.”

Time, cost and the amount of community interaction are the three measures the respondents were asked to rate as outcomes from the change to form-based code. Planning directors’ responses are illustrated in Figures 4.22, 4.23 and 4.24. Representative comments included: “We had 178 meetings of all varieties: That’s just crazy making.” The planning director in the northeast continued; “Code changed just as economy was crashing. Applications are picking up now and built product is very satisfying so far.”

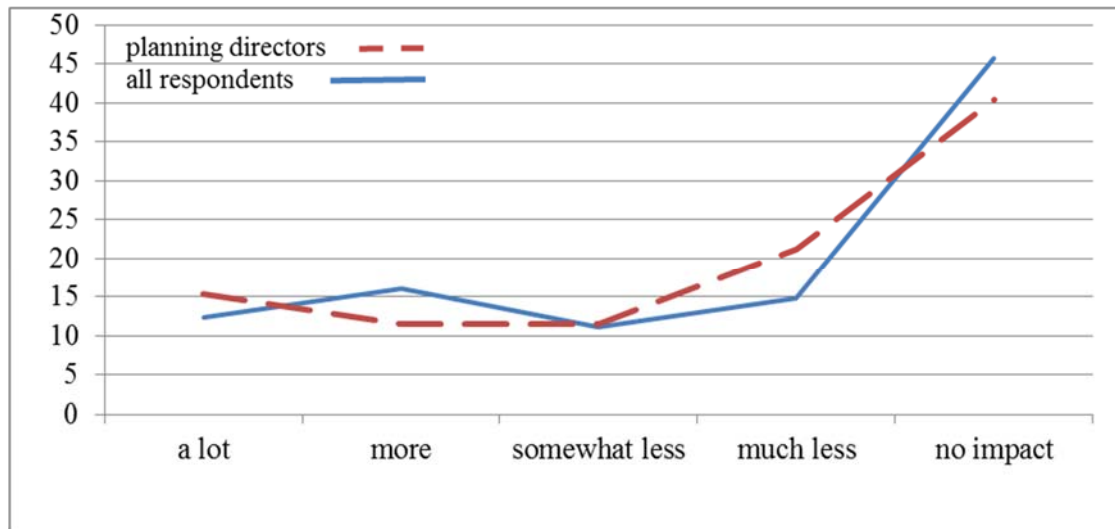


Figure 4.22 Comparison of Time Change by Planning Directors and All Survey Respondents

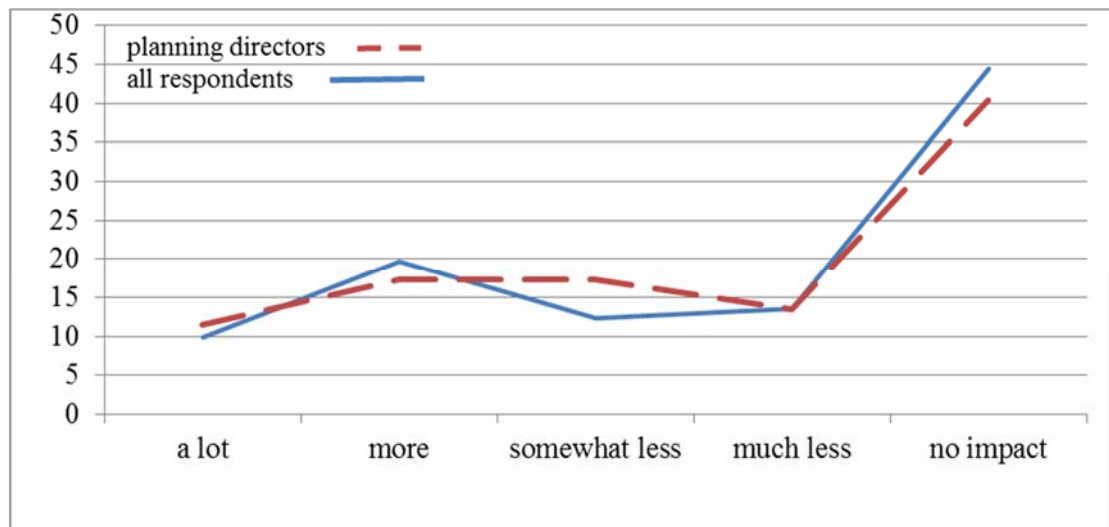


Figure 4.23 Comparison of Cost Change by Planning Directors and All Survey Respondents

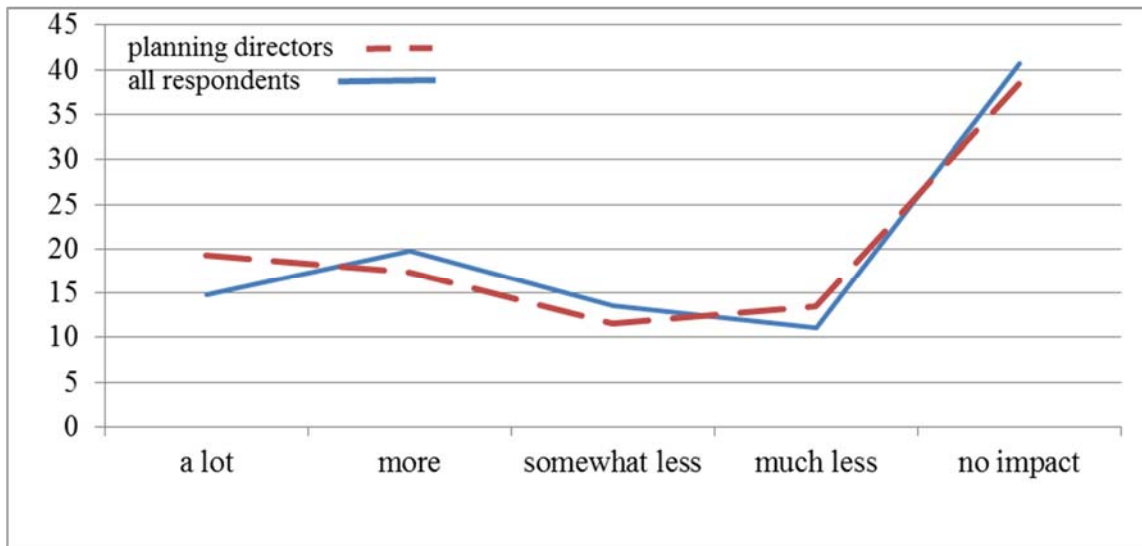


Figure 4.24 Comparison of Community Interaction by Planning Directors and All Survey Respondents

4.10 Survey Insights

This survey sets the framework for future research to determine how form-based code is adopted and implemented. The process varies by community. There is much more information that could be gleaned from this survey together with future data to provide insight into the subject of form-based codes, including comparisons of cities.

The results of this survey could be measured with the last question. Did zoning applications increase or decrease with the change to form-based code? Figure 4.25 illustrates the comparison of planning directors' responses to all survey responses. The results are highest for **not much increase** or **no increase at all**. Planning directors responded with 52.5 percent (32), compared to all respondents with 59.1 percent (55) out of 93 total responses. It may be too soon to assess all the results of code change. However, there is a bigger story to tell.

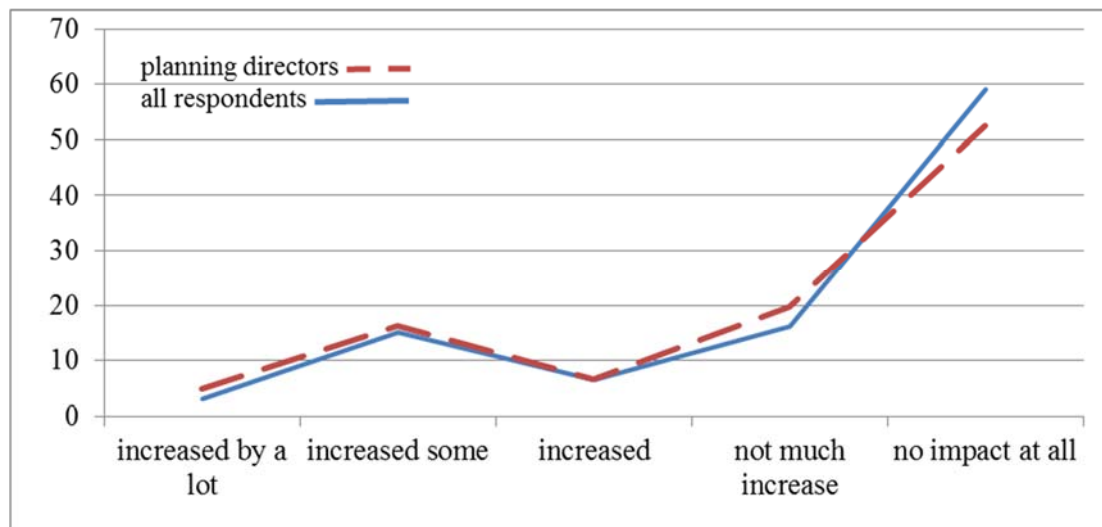


Figure 4.25 Comparison of Planning Directors and All Survey Respondents When Asked if Zoning Applications Increased or Decreased With Code Change

This survey provides understanding into the methods and process for the shift to form-based code in communities throughout the country. The survey information from respondents is extensive and the figures and tables provided in this dissertation include several important conclusions. Of the total 136 surveys 96 respondents, or 71 percent, offered their names, phone numbers and email addresses when asked if they would be available to provide follow-up information.

The planners' network is extensive and connected. Planners know the communities that are considering a change to form-based code, and which consultants are experienced with working with the new code. Several planning consultants offered to provide more detailed information and documentation from code projects they have in process or approved. Several conclusions can be inferred from this survey:

(1) Planners are dedicated to working with the community to understand and improve the quality of life for residents in their municipality.

Participants of this survey are highly experienced with form-based code, with 56 percent (71) of respondents reporting spending five or more years working with the code. Over 23.6 percent (29) had over one year experience. Planners reported that they participated in several years of educating and working with elected officials, staff and their communities to implement the new code. Of particular note is that 75 percent (97) responded that they spent a significant amount of time working with the community. Descriptions regarding the quality of the time spent mentioned by the respondents included; “1,000 [thousands] of hours of meetings,” with the meetings described as “heated,” and the community “[needing] lots of calming down,” and with issues such as “apprehension about losing control” as a result of code change.

(2) Leadership is important to the adoption and implementation of form-based code.

Planning directors are most often mentioned as leaders for code change—55.3 percent (73) by the respondents. Of the additional leaders mentioned, 41.7 percent (55) are members of city councils, county commissions, economic development councils, city and county managers and several private sector developers. Mayors are named by 21 respondents. The result is that leadership is important to change. The results of this survey clearly illustrate that the change to form-based code will not occur unless there are respected and powerful members of the community who lead the discussion and advocate for change. Change requires leadership.

(3) *The adoption of form-based code is often a hybrid.*

A hybrid code is often mentioned in the written responses as the path for communities changing their code from conventional to form-based. Hybrid codes are used to adapt form controls in the manner of design standards. As described by one respondent: “The City of [deleted name] Unified Development Code refers to design guidelines and design standards, and is not a true form-based code as some cities use. It is a hybrid. It works well with our large historic building stock.” Another comment from a planning director in a Midwestern large city also concluded: “The [deleted name] Zoning Code is a true ‘hybrid’ code and not a pure form-based code. There is substantial regulation of land uses as well as building form. Also, [deleted name] zoning excludes regulation of the public realm (streets, streetscapes), which distinguishes it from many form-based codes.” The conclusion is that it may be difficult to adopt a form-based code in a large city with a variety of uses including industrial and downtown districts.

(4) *Communities are primarily looking for development they perceive the new code will encourage development and redevelopment.*

Development is the outcome that the majority of respondents rank highest. Comments from respondents include descriptors including “more development,” “better development,” “expedited,” “dense” and “appropriate development.” A planner from a struggling Northeastern town sums up the discussion with the hope that their newly adopted form-based code will “foster development of a vibrant mixed-use district with a cohesive street layout and architectural character that includes commercial, residential, and civic uses and integration of open spaces, transit, bicycle, and pedestrian accommodations.” Aspirations for development echo

throughout the survey responses to each of the questions from planners in large or small, struggling or expanding cities. Competition for growth and development is strong among respondents.

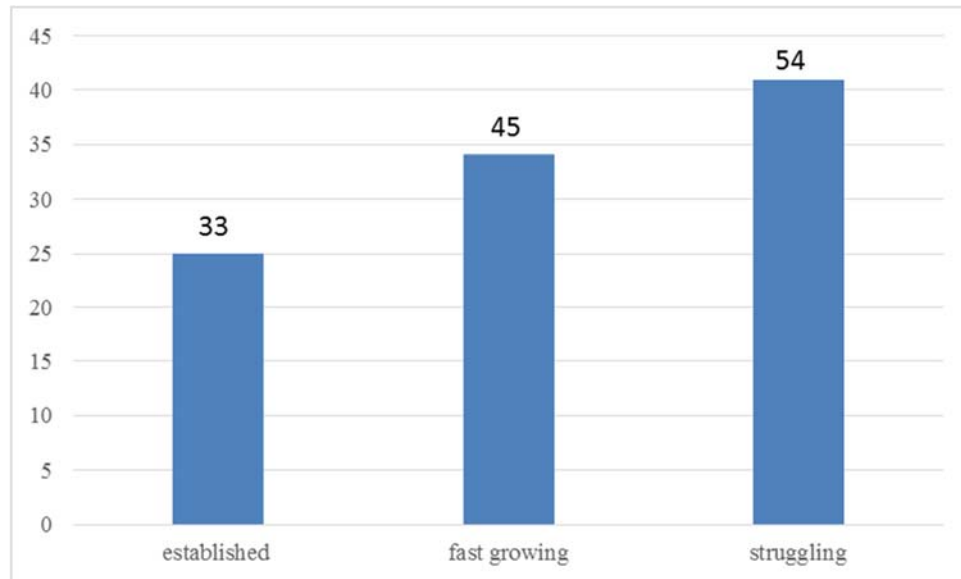


Figure 4.26 Comparison of Established, Fast-Growing and Struggling Communities

- (5) *The Great Recession impacted the implementation of code change. The economic downturn magnified the stress that cities are under to encourage new development. The downturn in the economy from 2007 to mid-year 2009 allowed communities to step back and implement the new code with the anticipation of encouraging new and redevelopment projects.*

Expectations among planners are that once the Great Recession ends, developers will emerge to invest in their communities. Once again planners across the survey from large, small, struggling and expanding cities expect that their new form-based code will ensure and attract development. To assess the effect of the recession, it is necessary to understand the location of the respondents. Figure 3.3 illustrates the mapped locations. Figure 4.26 compares the economic status of

respondents' communities. Review of the growth rate over the last ten years of each community determined the categories of *established*, with an approximate five percent increase in population; *fast-growing* with an average ten percent of increase; or *struggling*, with decreased population. Of these respondents 25 percent (33) are from established communities, 34.1 percent (45) from fast growing communities; and 40.9 percent (54) from struggling communities. This comment is from the planning director of a struggling city that has expectations of growth: "The form-based code succeeded at changing the way our city looked at new developments. Although there has not been much progress with new developments, when new development does come it will be constructed in a form that is more harmonious to the historic character of the city."

CHAPTER 5

PROTOCOL TWO—ADOPTION OF FORM-BASED CODE: CINCINNATI, DENVER AND MIAMI CASE STUDIES

Form-based code research is reinforced by case studies of cities where the new code has been introduced, approved and implemented to provide a descriptive and factual basis for communities considering a code change from Euclidean zoning.⁵⁸ Competition among cities often influences changes to zoning, land use and other city functions. The success of cities changing to form-based code is what Rangwala (2013) describes as the way to “inspire lasting buy-in and commitment by painting a picture of a better place.” Rangwala further described consultant “overselling” regarding the adoption of form-based code as a “panacea for the absence of good planning.” He stated this is exactly how *not* to influence cities, as “people resist agenda-driven influences.” Case studies appear to provide a more concrete basis for communities considering change.

The city case studies chosen for this research vary by demographics, location and the type of form-based code they are in the process of implementing. Cincinnati, with a population of 296,550, passed the overall form-based code in May, 2013. Each of its 52 neighborhoods decided if and when to apply for form-based code, with the first three neighborhoods currently approved and one in the process of code implementation. Denver, a city of 634,000 residents, adopted their city-wide hybrid code in June, 2010. Miami 21 was adopted as the first city-wide form-based code on May 20, 2010 in their

⁵⁸ There are a variety of definitions and methods of case studies. These three case studies are descriptive <http://writing.colostate.edu/guides/page.cfm?pageid=1290> (accessed September 12, 2014). Yin (1994) described case studies as a study to describe contextual conditions http://www.sagepub.com/upm-data/41407_1.pdf (accessed September 12, 2014).

city of 414,000 residents. Because all zoning is local, each code is customized and is being implemented in ways unique to its city. As is evidenced in the case studies, the common driver is expediting development. Each study is an overview based on research and personal interviews of people involved with proposing, adopting and implementing the code change.

5.1 Cincinnati

Roxanne Qualls has a significantly large footprint in Cincinnati. Qualls was a city council member from 1991 to 1999, and again from 2007 to 2013. She served as mayor from 1993 to 1999, and vice mayor from 2008 until 2013, at which time she ran for mayor in an election that some labeled the “Qualls redux” (Witterich 2013). A city planner by background, Qualls was an early member of the Congress of New Urbanism (CNU) and an original signatory of CNU’s 2009 Canons of Sustainable Architecture and Urbanism (Moule, Dittmar, and Polyzoides 2009). She lost the November 2013 mayoral election to fellow city council member John Cranley, by a 16 percent margin, primarily due to the controversy over construction of the \$138 million downtown streetcar.⁵⁹ The highly contested proposed city-wide parking lease also contributed to the outcome of the election.⁶⁰ Qualls favored both, while Cranley, running on a budget saving platform, opposed what he termed “high expenditures” (Witterich 2013). Qualls’ leadership and substantial work to adopt form-based code enabled her to carry a majority of voters in

⁵⁹ Construction on the 3.5 mile streetcar began in August 2013, in part funded by a Federal Transit Administration (FTA) \$45 million grant, and has an estimated cost of \$138 million. The consultant, KPMG, audit estimated completing the streetcar at \$70 million, compared to jettisoning the project and 30 percent construction at \$80 million not including repaying the HUD funding. The council voted in favor of completion December 19, 2013 (Osborne 2013).

⁶⁰ The parking lease is anticipated to bring in \$92 million by leasing parking meters throughout the city (Weber 2013).

the four neighborhoods that are currently adopting the code, as well as carry the downtown business district (WLWT.com 2013). At an Urban Land Institute (ULI) event held in September 2013, Cranley turned Qualls work against her by describing form-based code as a “scary” concept that would micromanage design and enforce specific paint colors, intimating that it would discourage developers (Witterich 2013).

Cincinnati has a unique planning history; it is recognized as the first community to develop a city and a regional plan. In 1925, Ladislas Segoe, the first staff city planner, partnered with Alfred Bettman, a local attorney, to produce the Official Plan of the City of Cincinnati, a landmark plan that set the standard for urban planning. The plan is significant on two levels. First, it is the first comprehensive City Efficient plan adopted in the country, and second, the plan and process went beyond city limits and encompassed the surrounding region. Opponents in Kentucky, across the state border from Cincinnati, fought their inclusion in the Cincinnati region, but lost their appeal when the Ohio Supreme Court ruled in favor of regional-based planning (Edelman and Allor 2003, Birch 2001). Segoe joined the consulting firm of Technical Advisory Corporation (TAC), one of the first early planning firms, and consulted throughout the country on comprehensive plans.⁶¹ Segoe’s work as a planning consultant was prolific, producing over one hundred comprehensive plans beginning with the Cincinnati plan in 1925 and ending with his practice tenure in 1971. His legacy of working with the community to garner plan support and gain constituency set a path for planning in Cincinnati that survives today.

⁶¹ Harland Bartholomew, city planner, was an early partner with TAC prior to establishing his planning office in St. Louis in 1916 (Cook 1989, Edelman and Allor 2003).

At the same time, early urbanists were working on Mariemont, a new suburb of Cincinnati and a model 1923 planned community endowed by philanthropist Mary Mulhenberg Emery (1844-1927). Emery employed John Nolen, Harvard-educated landscape architect and planner, to design the Utopian village.⁶² Mariemont was envisioned as a British Garden City built for emerging lower middle-class workers.⁶³ The completed village is often cited as an early example of New Urbanism, with short mixed-use blocks and a residential and retail community (Millard F. Rogers 2001). Mariemont and the Cincinnati 1925 city plan, along with the University of Cincinnati's prestigious planning school, solidified the reputation of strong planning leadership for the region.

Planning fared well in Cincinnati through the next decades, but temporarily ended in 2002. In an effort to save costs, then-mayor Charles Lukins's appointed task force merged what remained of the planning department with the economic development office—the intent being to make the city “developer friendly” (May 2007). Lukins' administration is credited with eliminating planning and presiding over a five-year decline in development. The negative effects of the decline had the neighborhoods and the business community clamoring for relief. Mark Mallory, elected mayor in 2007, made long-range planning a priority and reinstated a Department of City Planning (May 2007).

⁶² John Nolen (1869-1939) was the first American who self-identified as a city planner. A University of Pennsylvania Wharton School graduate Nolen entered Harvard University at age 34 to become a landscape architect, <http://telf.org/pioneer/john-nolen> (accessed September 6, 2014).

⁶³ Mariemont was cited by the American Planning Association (APA) in 2008 as one of 10 Great Neighborhoods. <http://www.planning.org/greatplaces/neighborhoods/2008/mariemont.htm>. and <http://www.planetizen.com/topthinkers/nolen> (accessed December 22, 2013).

5.1.1 Contextual Factors

The community noticed form-based code in 2008, when articles began appearing in local media. Presented as a process to remake the city into a desirable location for development in a city with minimal growth as illustrated in Table 5.1. The new code was touted as the best new way to encourage community planning: “A new zoning code gaining the support of community planners across the U.S. could set a new building standard for developers in these neighborhoods, one focused on the aesthetics, design and function of a space rather than its end use. Called form-based code, it can make the development process faster and more profitable” (Baverman 2008). The city council approved the first \$50,000 to fund the selected consultant, Opticos, and initiated the discussion to prepare a form-based code in 2009 (LeMaster 2009). In 2010, Qualls and the Cincinnati City Planning & Buildings office submitted an application for the \$2.4 million U.S. HUD Community Challenge Grant that the city would use to fund the development and implementation of PLAN CINCINNATI, the new comprehensive plan, the Land Development Code, and the subsequent form-based code (Peppers and Graves 2013).⁶⁴ The grant enabled the city to hire a larger consulting team led by Opticos Design from Berkeley, California along with Rick Hall Transportation, Tallahassee and Urban Design Associates, Pittsburgh.⁶⁵ Glaserworks is the local Cincinnati consultant on the team. In 2010, Opticos submitted a detailed scope of work to the city council with an estimated fee menu of tasks totaling \$500,000 to \$700,000 for a series of workshops

⁶⁴ Community Challenge Grants are a program of the U.S. Departments of Housing and Urban Development (HUD), Department of Transportation (DOT) and the Environmental Protection Agency (EPA). Funding program total was \$28 million primarily for master plans, zoning codes and building codes. The intent of the funding “fosters reform and reduces barriers to achieving affordable, economically vital, and sustainable communities (HUD 2011).”

⁶⁵ Each consultant is a member of the Congress of New Urbanism.

along with the pre-and post-charrette work. The cost proposal did not include the additional fees for the sub consultant team (Daley and Graves 2010).

Table 5.1 Cincinnati Census Data 2012

PEOPLE QUICKFACTS	CINCINNATI
Population	296,550
Percent change 2010 to 2012	-0.1%
White alone	49.3%
Black alone	44.8%
Hispanic alone	2.8%
Asian alone	1.8%
High school grad	83.9%
College grad	31.3%
Households	130,017
Persons per household	2.19
Homeownership rate	40.5%
Median home value	\$126,900
Per capita income	\$24,538
Average Household income	\$33,708
Persons below poverty level	29.4%
Travel time to work (minutes)	22.4
Land area square mile	77.94
Persons per square mile	3,809.8

Source: www.city-data.com/city/Cincinnati-Ohio.html
(accessed April 5, 2014)

The 2010 city council, along with the planning staff, established their intention to work with the six Livability Principles that HUD Office of Sustainable Communities and their partnering agencies developed, which are as follows: (1) provide more transportation choices; (2) promote equitable, affordable housing; (3) enhance economic competitiveness; (4) support existing communities; (5) coordinate policies and leverage investment; and (6) value communities and neighborhoods. The tools the city developed

to meet these HUD goals included a litany of current planning topics including: “form-based code, inclusionary zoning, incentive zoning, transit-oriented development (TOD), complete streets, transfer of development rights, crime prevention through environmental design (CPRED), site plan review/streamlined permitting process, and consolidated development regulations” (Peppers and Graves 2013).

5.1.2 Adoption Decisions

The decision for adoption of a new zoning code included a four-level program of education and discussion among the: (1) residents; (2) consultant; (3) the city planning office; and (4) the elected officials (Yung 2014). A review of early documents indicates that the introduction to changing the code evolved from a series of plans to reposition the city to encourage economic development. The 2008 GO CINCINNATI report, commissioned by and for the Cincinnati Chamber of Commerce, stated that their

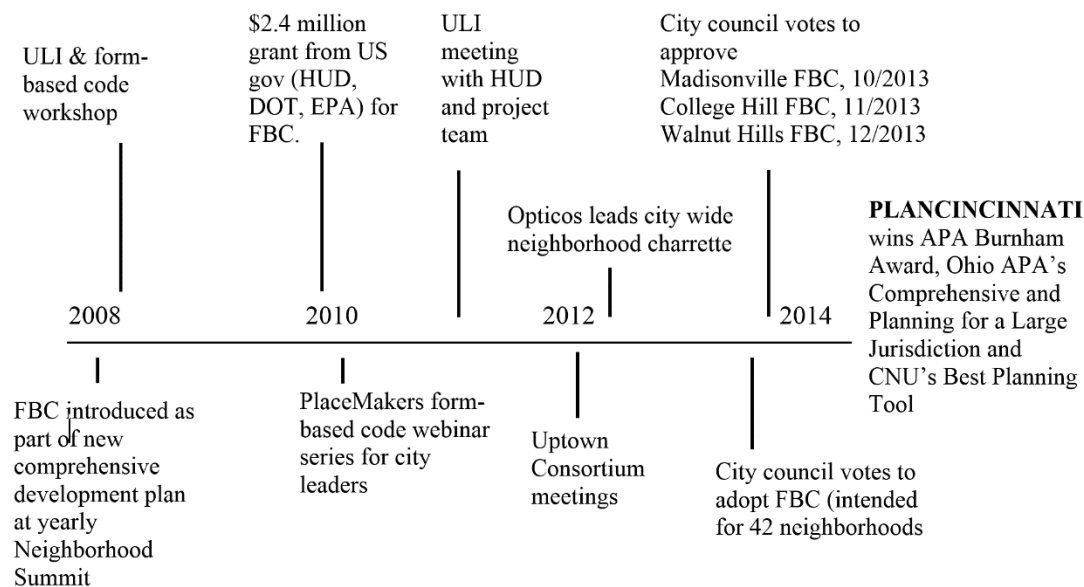


Figure 5.1 Timeline for Cincinnati form-based code

primary goal was to increase tax revenues. Specifically, the report organized by the city council who partnered with the chamber of commerce, stated that the city should encourage

development to support these goals regarding tax revenues to: “capture a net revenue increase of \$146 million, support nearly 5,000 new jobs and capture a greater share of the regions 45,000 regional jobs projected to be created by 2014 in key business sectors” (Bortz and Horst 2008). Additionally, in 2008, vice-mayor Qualls began leading visits for community members to Nashville to meet with residents and review their efforts with form-based code. Nashville established the process of implementing the code by neighborhood in 2006 under the direction their Metro Planning Director, Rick Bernhardt. Led by Bernhardt, a highly experienced expert, Nashville has become a prime example of form-based code in practice and implementation (Kreyling 2008).⁶⁶

The local discussions, panels and Nashville trips were building blocks leading to the bigger discussion among the community—the approval of a form-based code. The presentations at local meetings advocated for a form-based code that would allow a greater freedom of choice. The information included how early-Euclidean zoning began as a reaction to problems that are now addressed by a variety of codes for fire, police and health departments. Residents were asked what they wanted as a priority for their city, using visualization surveys illustrating their existing streetscapes, as compared to visualization images of tree-lined sidewalks with active businesses. The preference survey outcomes listed walkable neighborhoods as the first priority for the 52

⁶⁶ Rick Bernhardt, FAICP, is a signatory of the original Charter of New Urbanism, a frequent speaker and active member of CNU.

neighborhoods. Qualls (2014) notes that cities historically developed with traditional neighborhoods: housing and services surrounding local business streets.

The 2012 city-wide charrette. The first big event was the highly publicized charrette, held for five days from April 28 to May 2 with over 700 city residents in attendance. The charrette was advertised as the beginning of implementing a “visually based” code. The intent was defined as follows: “Form-based codes are considered to speed up the development process by making the permitting and approval process easier for developers. They won't be applied city-wide, but are attractive to neighborhoods that want to create, enhance, or maintain a mixed-use, walkable urban design” (LeMaster 2012). Results of the meetings are published in a report that outlines the process, discussion, results and design strategies for special neighborhood districts.

Recommended actions identified as the ten guiding principles included: (1) a “complete places” approach to revitalization; (2) make vibrant main streets a priority; (3) identify neighborhood revitalization as economic development; (4) build on existing rich assets; (5) create complete streets; (6) integrate storm water management across the transect; (7) incubate local businesses; (8) develop an aggressive strategy to bring people back; (9) create an effective administration process; and (10) use form-based codes for effective implementation (Opticos 2012). Photo-enhanced sketches of traditional neighborhoods and business districts are placed throughout the report. The process and the charrette were deemed a success by media and neighborhood participants (Qualls 2014, Yung 2014).

Four neighborhoods were identified through the charrette as primary candidates for the new code (Figure 5.2). Each of the four neighborhoods—Walnut Hills,

Madisonville, College Hill and Westwood—raised \$10,000 as their local contribution toward the costs, which was a “fraction” of the overall total cost but important to their participation and commitment to the process (Qualls 2014).

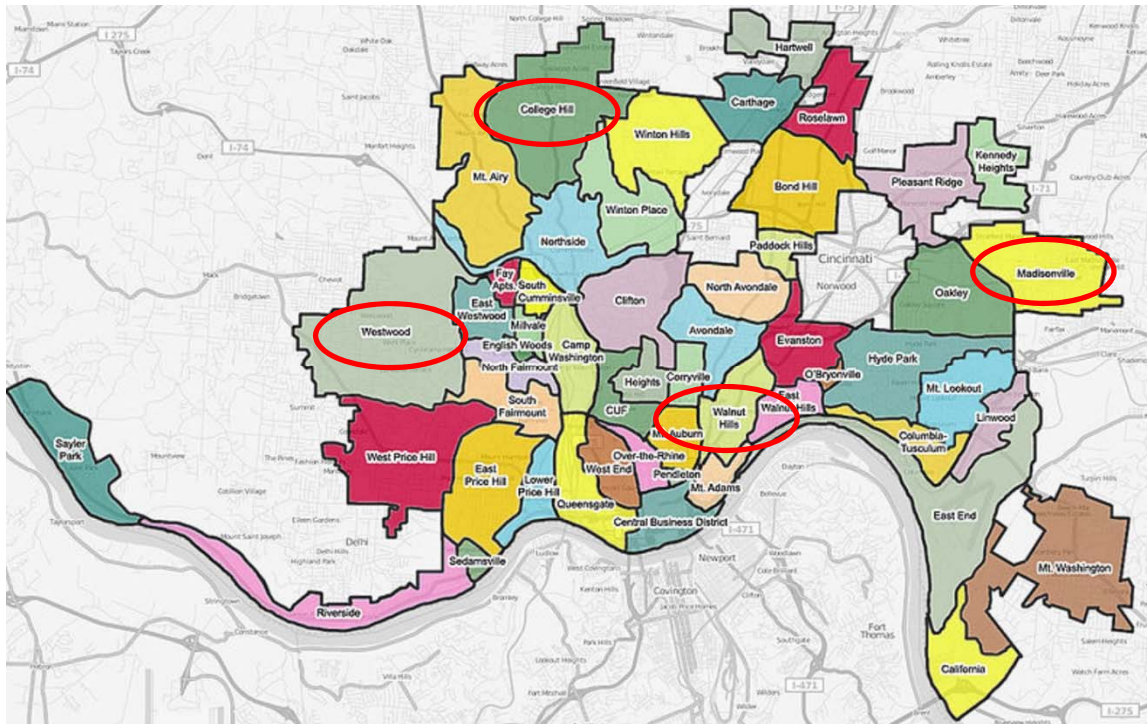


Figure 5.2 Cincinnati Neighborhood Map; Location of Westwood, Madisonville, College Hill and Walnut Hills

Source: <http://cincinnatihistorichomes.com/search/neighborhood+map> (accessed September 12, 2014)

The process for change. Community and city leaders conducted a significant outreach program to enhance education and understanding of the process for a code change. Websites sponsored by the city and local agencies, including Plan/Build/Live Cincinnati, the *Cincinnati Business Courier*, and the City Planning and Buildings office, kept the community informed on all aspects of the form-based code process. Under the

direction of city planners and elected officials, transparency and education of the community became the number one priority.

The community's adoption of form-based code demonstrates a textbook case study of Rogers' (2010) discussion of the five qualities of innovation: *relative advantage, compatibility, complexity, trialability and observability*. Qualls explains: "Innovation starts with leadership reaching out to neighborhood leaders, the American Institute of Architects and the university; you begin to build support" (Qualls 2014). Addressing *relative advantage* and *compatibility*, former mayor Mark Mallory explains on the Plan/Build/Live Cincinnati website that the city's ancestors put a lot of thought into building a great city, and today's laws and regulations could add new tools to reinvent the city to meet the "neighborhood, business and community needs of the 21st century" (Mallory 2013). *Complexity* is demonstrated by the city-wide charrette and the lengthy number of working groups, meetings, public reviews and drafts that are listed by the city to explain an extensive education process since the code change was first presented in 2008 (Peppers 2013).

Cincinnati, with a process similar to Nashville, is counting on the *trialability* and *observability* of the first four neighborhoods to provide the installment plan aspect of adoption. If Westwood, Madisonville, College Hill and Walnut Hills succeed with new development and a positive community view of form-based code, it is expected the additional 48 neighborhoods will follow. Creating positive reinforcement for the code change is important to the city: "Investing in our neighborhoods is critical to the growth and repopulation of Cincinnati," said City Manager Milton Dohoney, Jr. "College Hill is primed for new development, especially now that they are enacting a form-based code

that will create the kind of pedestrian-friendly environment that's so sought after” (Dohoney 2013).

Items necessary to facilitate change. Initially, the Opticos team provided a list of issues that would need to change to accommodate the new form-based code. The first item identified is Municode, the online database for zoning and code publication. Municode does not accommodate form-based code images on their website, but has recently advertised they are reorganizing to be able to post smart code and form-based code using InDesign software. Municode has not set a date to change software, and the current Municode only includes the narrative for the new Cincinnati form-based code (Municode 2014, Opticos 2012).

Not everyone supported the decision to adopt a new code, including the University of Cincinnati College of Design, Architecture, Art, and Planning (DAAP). As previously discussed, the architecture lobby is often against these code changes, describing them as an attempt to stifle creativity by mandating form and design. *ARCHITECT*, the magazine representing current design issues, supported DAAP and went on to voice their objections by quoting from the new regulations: “Table A (Allowable Administrative Variations) sets forth all variations that are permitted in the transect zones. No other variations to the prescribed form shall be permitted. Failure to conform to the prescribed form shall result in the denial of a building permit” (Betsky 2012). Architects relate that design variations are what energizes them. “Prescribed form” is exactly what architects cannot tolerate, and what they further describe as mandating design and therefore stifling creativity.

ARCHITECT magazine has published several articles on form-based code, not only related to Cincinnati, but in response to any change to existing codes. Speaking against form-based code at a public hearing, architecture professors described the concerns of the DAAP faculty such that a “form-based code would stifle good architecture in Cincinnati” and the code needed to accommodate inventive design. Rather than letting the lack of departure from regulations become a sticking point, the city council decided the code would not include graphical architectural design standards, and encouraged DAAP to assist with charrettes and with writing the final code:

Vice Mayor Qualls expressed her criticism that the illustrations in the code show traditional architecture although the code permits other architectural styles. Mr. Ross stated that the form-based code would not contain any architectural standards and that variations would be permitted similarly to the existing zoning code. Ms. Marisa Zapata stated that the University of Cincinnati School of Planning would take the opportunity to collaborate on the neighborhood charrettes. (Graves 2013).

5.1.3 Implementation

The final form-based code was approved May 8, 2013. The first page describes what the code is expected to accomplish for the city:

Form-based coding represents a paradigm shift in the way that the built environment is regulated. This shift is necessary because the conventional, use-based approach to zoning has been shown to be ineffective for regulating diverse, urban, mixed-use environments. Cincinnati is using form-based coding to help achieve the overarching goal of Plan Cincinnati, which is thriving re-urbanization. (Peppers 2013)

Development is the key to success for the code change. The Great Recession may have helped the change to form-based code in slow-growth cities like Cincinnati, depending on how the last four years are interpreted. Development was strong in most major cities before the recession, with the exception of those in the Midwest “rustbelt.” The length and extent of the recession caused cities like Cincinnati to determine they needed to

make changes to encourage development. Change is an important element of innovation because it determines *relative advantage*. “Innovation is perceived as better than the idea it supersedes” (Rogers 2003).

If development is not occurring, why not change the zoning and see if it spurs development? That is the question that Cincinnati voters asked in the 2013 mayoral election. Qualls ran on a platform promoting development in town to enhance regional competitiveness. Cranley ran on a platform of needing to fund infrastructure, services and jobs. Critics of promoting in-town development as the remedy for regional growth refer to it as “Portlandization,” and opined that Cincinnati could have become the proving ground among rust belt cities if Qualls prevailed in the election (Weber 2013).⁶⁷

With four neighborhoods adopting form-based code, Cincinnati was on its way to developing a city-wide form-based code but for one important element—politics. The wrong mayor won. Mayor Cranley, on the record as the politician who considers the code “scary,” and who has hinted at reducing the size of the city’s planning office or threatening to close it, is not considered a friend of planning. Cranley was supportive of reducing the planning office in 2002, stating: “The Planning Department was almost given the mission of causing problems, because it was completely divorced from economic incentives and any kind of market reality.” Again in 2013, Cranley “stated his opposition to planning and zoning, stating that the solution to neighborhood problems is money” (Yung 2013).

⁶⁷ “Portlandization” refers to restricting growth by barriers or growth boundaries. The term was first used in 2002 by the National Policy Center in Washington, DC, <https://www.nationalcenter.org/NewSegregation.pdf> (accessed January 15, 2014).

The local planning goals remain the same according to the city: (1) revitalize neighborhood business districts; (2) add compatible urban fill; (3) encourage better community engagement; and (4) streamline the development process (Graves 2013). Each of the four neighborhoods that adopted form-based code has put together their regulation plan and transects that they are currently in the process of implementing. College Hill has led the implementation to date, using a portion of the city's \$1.2 million grant from HUD to demolish vacant storefronts, with the intent of attracting new retail to their main street (Dohoney 2013). The neighborhoods are working to consolidate parcels that are identified as having potential for development when the market returns.

5.1.4 Outcomes

Discussed throughout this paper is the issue that it may be too early to assess problems or issues of changing to form-based code. Cincinnati's adoption in 2013 is too new for the city staff to determine any positive or negative effects of the change.

The jury is out on design creativity

An issue that emerged earlier in the process is that architects perceive the new code as formulaic and favoring traditional architecture. The sketches and visualization that the consultants used throughout the charrettes and workshops illustrated a traditional look at neighborhoods and building design. Substantial time was spent on describing porches, dormers, and pitched roofs. Critics, including the University of Cincinnati DAAP architects, were not entirely in agreement with these highly modulated and homogenized design tools, believing they stifle creativity. While Qualls expressed the need for all city staff to be knowledgeable and supportive of the form-based code

and the need for design creativity, the proof is still in doubt until design is tested within the new code.

Across the U.S. 471 Bridge and the Ohio River, the adjacent town of Bellevue, Kentucky is having form-based code issues of their own over a renovation to an existing Arby's restaurant. Bellevue's 2010 form-based code restricts drive-through food pickup lanes, which Arby's requests as a grandfathered right. Form-based code city planners have determined the drive-through lanes are not in keeping with the new code. The zoning administration office and Arby's are working to satisfy the form requirements for the renovated drive-through restaurant.⁶⁸ This news has no doubt been noticed by the residents and elected officials across the river in Cincinnati. Mayor Cranley has been unrestrained in his negative comments regarding developers' response to the new code: "I know all of the major developers in town; they don't want form-based codes."⁶⁹ While several additional neighborhoods have expressed interest in adopting form-based code, the city council is not yet ready to approve more neighborhoods than the existing four. Mayor Cranley praises the new regulating plans for the four neighborhoods but insists that they can be accomplished with traditional zoning rather than changing an entire code. Charles Graves, the city's building and zoning director, states that there is no additional funding for form-based code approvals currently in the budget. It appears that form-based code may be on hold for now while the city conducts public meetings to introduce changes to their zoning code, as announced on the Cincinnati.com planning

⁶⁸ Additional information, "Plans for New Bellevue Arby's Stalled After Zoning Meeting." *The River City News*, <http://rcnky.com/articles/2014/04/11/plans-new-bellevue-arbys-stalled-after-zoning-meeting> (accessed May 20 2014).

⁶⁹ Smith, Carrie Blackmore, "Zoning code alternative in limbo." Cincinnati.com, <http://www.cincinnati.com/story/news/2014/03/21/zoning-code-alternative-limbo/6724493/> (accessed May 24 2014).

website: “Talking about zoning codes may put some people to sleep, but a code is a powerful tool for shaping neighborhoods. That’s why Cincinnati residents should get involved in this effort by offering feedback on the proposed new code. There are several ways to review and offer suggestions on the changes.”⁷⁰

The discussion continues in Cincinnati. A new land development code is underway, with public meetings being held through the summer. The draft code is expected to be available for review in the fall of 2014 and adopted in 2015. Additional zoning changes are expected to follow.

Design regulations also remain a controversial issue. Aaron Betsky, director of the Cincinnati Art Museum from 2004 to 2014, published “Form follows Fiat,” in which he describes that under the new form-based code neither Cincinnati’s Union Terminal nor New York City’s Highline could be built:

With one stroke, the City of Cincinnati has earned the right to tell us in what style we shall build. Part of **Plan Cincinnati** recently adopted by City Council, the code takes away many of the achievements that the first comprehensive plan in decades gave us in terms of clarity and possibilities. The roots of form-based code lie in the work of Christopher Alexander and the preaching of New Urbanism. It has all the hallmarks of the thinking that wants America to freeze its physical form and even, if possible, go back to the innocence of an imagined earlier past of porches, gables, row houses, and all the other hallmarks of a particular way of building, social relations, and economic conditions.⁷¹

⁷⁰ Encourage urban layout in city neighborhoods, <http://www.cincinnati.com/story/opinion/editorials/2014/06/15/encourage-urban-layout-city-neighborhoods/10566479/> (accessed June 21, 2014).

⁷¹ Aaron Betsky, “Form follows Fiat”, <http://www.architectmagazine.com/urban-development/plan-cincinnati-lays-down-the-law-with-form-based-code.aspx> (accessed August 1, 2014).

Table 5.2 Cincinnati Summary Issues and Results

CINCINNATI SUMMARY		
	ISSUES	RESULTS
CONTEXTUAL FACTORS	Neighborhoods want to encourage development while controlling building design and use.	The Chamber of Commerce and city agencies team to put together a learning strategy for elected officials and residents to become informed about form-based code.
ADOPTION DECISIONS	Roxanne Qualls, city council member, mayoral candidate and former mayor, leads the adoption.	Qualls runs against another council member for mayor in 2013. Cranley, city council member who opposed form-based code, wins election.
IMPLEMENTATION	Four neighborhoods lead the change to form-based code.	Form-based code approved in three neighborhoods. Westwood approval on hold.
OUTCOMES	Elected officials differ on adoption of form-based code. New land-development code meetings are scheduled through 2014. Zoning is expected to follow in 2015.	Mayor Cranley is supporting new zoning and land- use mapping city-wide, while noting that developers believe the new form-based code is “scary.” At the same time the new code won two national awards from CNU and APA along with one state award from APA.

5.2 Denver

Julie Underdahl, newly elected Denver planning board chair, describes the city's recent growth as "outside in now, not inside out," but she quickly notes that the city is "the sixth fastest growing in the country and the first choice among 25 to 35 year olds."

⁷² Underdahl's remarks are representative of the concerted efforts of local private and public sector city leaders. They are proud that Denver remains highly competitive. Business leaders are quick to mention that the city is vigilant in regard to actions that increase their population. In 1983 the city was at a population high with 511,000, but by 1990 it had dropped to 468,000, a nine percent change in seven years. The flight was primarily due to white migration, with jobs and businesses relocating to suburbs such as Aurora. (At the same time Aurora recorded explosive growth with a 40 percent increase.⁷³) Also during that period, the Denver region increased 14.2 percent, and the state 14 percent. Growth was occurring in the suburbs, region, and state, but clearly the city of Denver had problems. By 1994, the population began to rebound and in 2012 city population was 634,245. "We were doubtful for a while but [the economy] came back, primarily due to our active lifestyle choices, the arts and culture," says Underdahl.⁷⁴ Current population is on the upswing among other indicators according to U.S. census data as shown in Figure 5.3.

⁷² Julie Underdahl, Interview with author. Phone interview. Atlanta, May 29, 2014.

⁷³ USA online: <http://www.theusaonline.com/cities/denver.htm>, (accessed April 15, 2014).

⁷⁴ Underdahl, 2014.

Forbes reports that Denver is number 16 of the top 20 fastest growing cities, with a 1.3 percent growth rate per year in 2012 and 2013.⁷⁵ The city's business organization, The Downtown Denver Partnership (DDP), reports downtown has over \$0.6 billion in non-residential development since 2004. The DDP also posts rankings including;

- Seventh among 102 cities in Business Journals' On Numbers Economic Index, a monthly measure of economic vitality (Business Journals, 2013)
- Seventh best city for moms (Redfin, 2013)
- Third best city for small business (Business Journals, 2013)
- Eighth best city for young entrepreneurs (Under30CEO, 2013)
- Fourth best city for job seekers (Forbes, 2013)
- Third best city in the world with the brightest future for oil and gas industry careers
- One of the top 10 cities for Urban Forests (American Forests, 2013).⁷⁶

Denver is highly competitive among American cities regarding addressing the characteristics Glaeser (2011) describes as causal: postindustrial, global, and suburban, and offering appropriate pricing, services, innovation, education, and politics. Mayor Michael Hancock promotes Denver as "prime for the global stage." Speaking at the 2013 Global Cities Initiative sponsored by Brookings and chaired by Richard Dailey, former Chicago mayor, Hancock said; "We're on the brink of tremendous opportunities that will boost our city and entire region to another level of national and international importance." Hancock took the opportunity to announce the May 30, 2014 press release regarding the U.S. Commerce Department's United States Patent and Trademark Office

⁷⁵ *Forbes* information regarding Denver's growth refer to: <http://www.forbes.com/pictures/mhj45mhl/16-denver-co/>, (accessed April 15, 2014).

⁷⁶ Downtown Denver Partnership information, <http://www.downtowndenver.com/key-facts-rankings> (accessed April 15, 2014).

(USPTO) intent to open a downtown Denver location in June 2014. Denver's opening would bring the total number of USPTO satellite offices up to four: one in each time zone, including Detroit, Dallas and San Jose.⁷⁷

Dailey stated that services dominate Denver's economy and recommended city leaders concentrate more resources to build manufacturing jobs. He suggested increasing the number of languages taught in secondary and college level education as a proven path, and the approach Chicago took to increase their global interests. Global Initiative's

Table 5.3 Denver 2012 Census Data

PEOPLE QUICKFACTS	Denver
Population	634,265
Per cent change 2010 to 2012	5.7%
White alone	52.2%
Black alone	10.2%
Hispanic alone	31.8%
Asian alone	3.4%
High school grad	85.1%
College grad	42.2%
Households	261,836
Persons per household	2.26
Homeownership rate	50.4%
Median home value	\$246,300
Per capita income	\$20,886
Median Household income	\$32,597
Persons below poverty level	18.9%
Travel time to work (minutes)	24.8
Land area square mile	153.00
Persons per square mile	3,922.6

Source: www.city-data.com/city/Denver-Colorado.html,
(accessed April 15, 2014).

⁷⁷ U.S. Commerce Department's United States Patent and Trademark Office,
<http://www.uspto.gov/news/pr/2014/1416.jsp> (accessed April 15, 2014).

goal is to increase the global aspect of city competition to enable the next generation is better able to compete (Garcia 2014).⁷⁸ Former New York City Mayor Michael Bloomberg summed up the competitive cities discussion quite neatly in a post on Planetizen: "Economists may not say it this way but the truth of the matter is being cool counts. When people can find inspiration in a community that also offers great parks, safe streets and extensive mass transit, they vote with their feet."⁷⁹ This is precisely what Denver leaders promote in their city.

5.2.1 Contextual Factors

Zoning “for the purpose of promoting health, safety, morals or the general welfare of the community” was approved by the Denver electorate May 15, 1923 in the early wave of approvals that swept the country prior to the 1926 Euclid Supreme Court ruling.⁸⁰ On February 11, 1925, the first zoning map and the board of adjustment was put in place and further redefined in 1926. That early zoning survived until 1955 when a more detailed plan, commonly referred to as Chapter 59, was developed as part of the revised municipal code. The 50s code was described as “cumbersome and complicated and unreliable,” according to then-planning director Peter Parks.⁸¹ The community was looking for the economic development needed to create growth into the 21st century.

⁷⁸ The Global Cities Initiative, <http://www.brookings.edu/about/projects/global-cities> (accessed May 15, 2014).

⁷⁹ Bloomberg *What Will It Take to Win the Global Competition Between Cities?* <http://www.planetizen.com/node/55765> (accessed June 21, 2014).

⁸⁰ History of Denver zoning, <https://www.denvergov.org/boa/BoardofAdjustmentforZoning/About/HistoryofDenverBOA/tabid/437571/Default.aspx>, (April 18, 2014).

⁸¹ Planetizen conversation with Peter Parks, “A Return to Physical Planning” <http://www.planetizen.com/node/46586> (accessed August 22, 2014).

Development in Denver is centered on the big projects; Stapleton, Union Station, LoDo (Lower Downtown) and the Convention Center are the development centers that have most changed the appearance of the city over the last ten years. Since 2008, an estimated \$4.8 billion in new projects have been built. Current projects make up \$1.8 billion of the total.⁸² North of the downtown is the \$500 million redevelopment of Union Station, a public/private partnership between the city, county and numerous private sector developers consolidated as the Denver Union Station Project Authority (DUSPA).

Union Station

Denver was founded in 1858. Rail first came to the city in 1870, and by the time the historic Union Station opened in 1880, Denver established itself as a rail hub. Active until the 1950s, the station was part of the FasTracks 2004 voter referendum, which enabled the city to reinvent itself as a transportation hub. Luckily for the city, the historic station was not demolished over the last fifty years. Re-opened in May 2014, the new transit station includes the Amtrak New York to California line, a 22-hub bus station and soon to come commuter rail. Rail use is substantially diminished from the 110 trains per day that went through the station in the early 20th century, but the project represents a transformative effort for the city nonetheless.⁸³ The station is expected to be the transfer location for two hundred thousand people per day passing through the area. New development around the station in the form of hotels, restaurants, office and services is estimated to total over \$1 billion.⁸⁴

⁸² Development since 2008, http://www.confluence-denver.com/features/ddp_map_042314.aspx, (accessed April 14, 2014).

⁸³ Union Station Transit, <http://www.rtd-denver.com/unionstation-map.shtml> (accessed June 1, 2014).

⁸⁴ Union Station opening, http://www.rtd-fastracks.com/dus_1 (accessed June 1, 2014).

Convention Center

South of the downtown, the Colorado Convention Center (CCC) opened in 1990. The 584,000-square-foot center is directly adjacent to a variety of price point hotels and services on 14th Street. This close access to services makes the CCC attractive to business conventions, and helps it achieve a rank of 11th to 13th among the country's convention centers. The facility has a strong following among meeting planners and convention attendees who want adjacent access to hotel rooms. The CCC was awarded a May 2014 LEED (leadership in Energy and Environmental Design) Gold certification, making it one of a new wave of sustainable conference centers throughout the United States.^{85 86}

Stapleton

Located about 15 miles northeast of the downtown Stapleton is the “largest urban infill redevelopment project in the country.”⁸⁷ Formerly the site of the Stapleton International Airport from 1929 to 1995, the 4,700 acres are now home to 58,000 people. Selected as the developer in 1998, Forest City envisioned a New Urbanist community for the 00s, with a detailed pattern book for development. The area has grown 82 percent since the first residents converged in 2002. At the same time, additional New Urbanist communities were being built, including Celebration and Baldwin Park, in Orlando, Florida—each with its own pattern book providing detailed

⁸⁵ Colorado Convention Center ranking by *USA Today*, <http://www.usatoday.com/story/travel/destinations/2013/08/21/top-50-destinations-for-meeting-planners/2681695/> (accessed June 1, 2014).

⁸⁶ LEED Gold certification announcement, <http://denverconvention.com/about-us/media-center/press-releases/colorado-convention-center-achieves-gold-leed-certification> (accessed June 1, 2014).

⁸⁷ Stapleton, <http://www.stapletondenver.com/>. (accessed June 1, 2014).

design elements for its specific development.⁸⁸ Stapleton's build out of development amenities such as parks and retail along with the housing components was initially slow, a result of the weak economy from the Great Recession, but the pace has increased since 2008. Local business and neighborhood leaders note that Stapleton is coming back and describe the development as going "like gangbusters."⁸⁹

LoDo

Lower downtown, locally known LoDo, is considered the first sustainability project in the city. LoDo is the result of the effort to put a stop to demolition in the skid-row, empty warehouse district of the city. Early preservationists were concerned that the area would become a vast wasteland of empty city blocks, as was occurring in other cities. In 1983, then-mayor, Federico Peña agreed, and together with downtown leaders began to establish a historic district. The 23-block area was re-planned as a downtown development district, and after much debate—and another city administration later—the LoDo Historic District was approved in 1988. In 1995 Coors Field opened and additional development followed. Denver's LoDo district successes contributed to research on historic districts as economics generators and real estate value boosters (McMahon 2012).⁹⁰

As Bloomberg further states, to be "cool" means that cities: "Must compete for the grand prize: intellectual capital and talent. I have long believed that talent attracts capital far more effectively and consistently than capital attracts talent. The most

⁸⁸ Pattern books for each development were completed by the design team: Stapleton by Urban Design Associates and EDAW (now AECOM) for Forest City Development; Celebration by Urban Design Associates and EDAW, for the Disney Company; and Baldwin Park by Glatting Jackson (now AECOM) for the Baldwin Park Development Company.

⁸⁹ Stapleton *ibid*.

⁹⁰ LoDo information refer to; <http://www.lodo.org/about-us2/> (accessed June 1, 2014).

creative individuals want to live in places that protect personal freedoms, prize diversity and offer an abundance of cultural opportunities. A city that wants to attract creators must offer a fertile breeding ground for new ideas and innovations."⁹¹ Denver appears to be making a strong effort by focusing development in these four growth centers.

5.2.2 Adoption Decisions

Armed with successful projects, increasing population, and a penchant for taking on tough development issues, the city embarked on an update to their large, outdated and complicated 1955 Chapter 59, 639-page zoning code. Blueprint Denver, published in 2002 as an addendum to the 2000 Denver Comprehensive Plan, identified three focus themes: (1) areas of change and areas of stability; (2) multi-modal streets; and (3) mixed-use development. At the same time the city, through a combination of local advocates and consultants, became interested in walkability and building form. According to the city's website, residents envisioned returning to:

America's first cities were built around walkable neighborhoods in which residential, retail and commercial uses all came together. In the latter half of the 20th century, however, these mixed-use urban centers gave way to more restricted development as single-use zoning became a more common planning tool. In Denver, our streetcar districts retain remnants of historic mixed-use development, and new infill projects and infrastructure investments—especially around transit stations—are helping to re-create communities where people can walk more frequently to their daily errands.⁹²

The Zoning Code Task Force was appointed in 2005 by then-mayor Hickenlooper (now Colorado governor) to oversee the development and adoption of a

⁹¹ Bloomberg, *ibid.*

⁹² Chapter 59,

<http://www.denvergov.org/cpd/CommunityPlanningandDevelopment/Zoning/DenverZoningCode/tabid/432507/Default.aspx> (accessed June 1, 2014).

new code.⁹³ CodeStudio was chosen as the lead consultant. Tina Axelrad, principal planner and lawyer with the City and County of Denver, noted that the five-year plan was “a roadmap to implement where growth and transportation investment should occur.” Form-based code provided “greater balance of the type of form and pattern of building” that Denver residents were interested in implementing. The community wanted an emphasis on the “process for scheduling reviews—the current zoning code (Chapter 59) had 99 different procedures.” Denver’s approval process involved 13 council districts with two advertised meetings per district, along with numerous on-demand meetings over three months. The key lesson for planners was that face-to-face, one-on-one meetings were the most effective. People wanted to know “how will this affect me?”

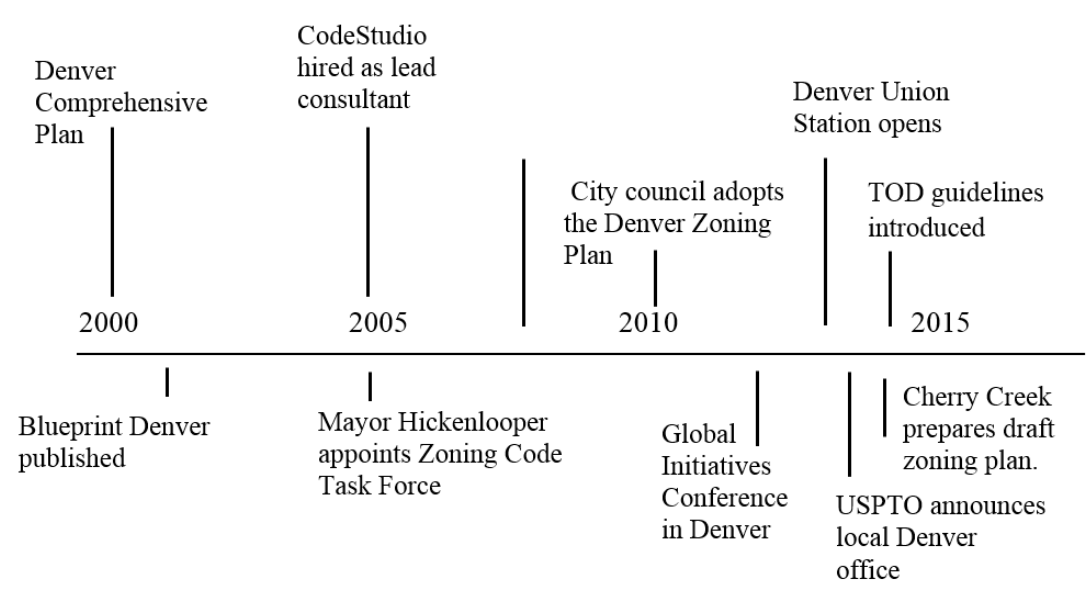


Figure 5.3 Timeline for Denver Form-Based Code

⁹³ John Hickenlooper was one of the first business leaders in LoDo with the founding of Colorado’s first brewpub, the Wynkoop Brewing Company.

5.2.3 Implementation

According to Axelrad, the Denver Zoning Code is a true hybrid code and not considered a pure form-based code. It includes substantial regulation of land uses as well as building form. Denver's new code excludes regulation of the public realm, including streets and streetscape, which distinguishes it from many form-based codes. Implementation has been slow in Denver due to the sluggish economy and the length of time to approve the new zoning, as well as the need to educate the community and developers on the new language of zoning. The plan was to (1) build a solid foundation for the new Denver zoning code, then anticipate and facilitate change and (2) engage the business community with the final draft for a reality check. Developers questioned how gas stations, grocery stores and retail would work with the new code. The business reviewers requested planners build in more safety valves into the process, which has been an ongoing activity.

Three districts were incorporated into the new zoning code as the Chapter 59 overlay districts, encompassing: (1) the Cherry Creek north business center, (2) the downtown, including LoDo and the Central Station Development plan; and (3) the 100 planned unit developments (PUD) that exist throughout the city. For the present the city website states; “The Denver Zoning Code, a comprehensive update to the text and map, was unanimously adopted by City Council on June 21, 2010 and became effective June

25, 2010. Properties that were not remapped as part of the comprehensive update will continue to operate under Former Chapter 59 for all provisions and procedures.”⁹⁴

5.2.4 Outcomes

On April 7, 2014 Amendment 16 2014-113 passed, which “repealed and replaced” the zoning code as a “restatement of entire addition to the code.”⁹⁵ The total clean up revisions included:

- (1) Building Form Standards (Articles 3-9 - All Zone Districts),
- (2) Cross-Reference Corrections
- (3) Definitions
- (4) Definitions - Uses
- (5) Design Standards (Article 10 - All)
- (6) Graphics and Formatting Corrections
- (7) Rules of Measurement
- (8) Signs
- (9) Text Formatting
- (10) Corrections Use Limitations - Primary Uses
- (11) Use Limitations - Accessory Uses
- (12) Use Tables
- (13) Zoning Procedures (Article 12 – All)
- (14) Zoning Procedures (Article 12 - All)

Cherry Creek North business district, a business improvement district (BID), was not included in the 2010 Denver Zoning code pending preparation of their development master plan. The plan, prepared under intense discussion, was completed in 2014 and recommends higher floor area ratio (FAR) for commercial uses, along with less parking. Neighborhoods are protected, which encouraged the community to favor of the plan. The business and residential communities had long been on the defensive in regard to

⁹⁴ Hybrid code note in the zoning website,
<http://www.denvergov.org/cpd/CommunityPlanningandDevelopment/Zoning/DenverZoningCode/tabid/432507/Default.aspx> (accessed June 1, 2014).

⁹⁵ Amendments to the code,
http://www.denvergov.org/Portals/646/documents/Zoning/text_amendments/DZC_Legislative_History.pdf (accessed June 1, 2014).

building height, but the master plan appears to negate this issue: building heights had been limited to four stories under Chapter 59 but the recommendations increase the height to 12 stories. A seven-story luxury hotel is planned for the area, replacing the planned office complex. Recommendations for parking decreased from 3.3 spaces per 1000 square feet to 2.5 spaces to encourage transit ridership. Acceptance of this plan is a big step for the district, after a three year discussion that focused primarily on building heights in the 16 block BID. This “regulating plan” carries a weight of expectation because under the former Chapter 59 zoning code, the community and developers were on hold debating what to do with “old zoning” while they waited for the new plan.

There is substantial anticipation with the expanded zoning agenda, developers anticipating new projects, and the community acknowledging their new Denver Zoning Code. Brad Buchanan, a Denver architect named planning director in 2014, is a former zoning commission chair and member of the zoning code task force anticipating new challenges.⁹⁶ Denver planners consider the new code a “living document” that will continue to be updated as needed. As one planner put it “we didn’t know what we didn’t know.”⁹⁷

⁹⁶ Brad Buchanan, <http://insiderealestatenews.com/2014/02/12/buchanan-named-planning-director/> (accessed June 21, 2014).

⁹⁷ "Zoning to Shape Urban Form", held at the annual meeting of the *American Planning Association*. Chicago, 2013.

Table 5.4 Denver Summary of Issues and Results

DENVER SUMMARY	
ISSUES	RESULTS
CONTEXTUAL FACTORS	Community overwhelmed by the 638 page Chapter 59 code.
ADOPTION DECISIONS	Mayor Hickenlooper and his administration decide to proceed with a Zoning Task Force.
	Peter Parks, planning consultant chosen to lead the plan.
IMPLEMENTATION	City Council votes to approve the Denver Zoning Code after a five year planning process.
	Hybrid code in adopted.
	Zoning code implemented along with areas of former Chapter 59 zoning are put in place.
OUTCOMES	Planning continues in areas that were not included in the new Denver zoning code.
	Cherry Creek presents plan after three year process for their BID. Improved Denver Zoning Code result of Amendment 16 rewrite. TOD guidelines introduced in 2014.

5.3 Miami

Time magazine referred to Miami as “Paradise Lost” in their November 1981, cover story. Reporting sobering statistics regarding drugs, crime and refugees, *Time* described the city as one of the most crime-intensive in the country. Films such as *Scarface*, and *Miami Vice* on weekly television, further reinforced this image. The message was clear that Miami was a vacation destination, but not the place to live, work or raise a family. *Time*’s follow up article in November, 2006, reported the city as the least affordable in the country, stating that: “Heavy reliance on the tourism industry and its attendant low-wage service jobs has given Miami one of America’s lowest household

median incomes” (\$33,000).⁹⁸ By 2014, the city has once again become a booming real estate Mecca. Soaring commercial land prices fuel its economy, with an increase of 20 percent in Miami-Dade County to 40 to 60 percent in the Brickell downtown and the Design District over the past three years, due in part to their “flexible zoning:” that is, Miami 21 (Danseyar 2014).

5.3.1 Contextual Factors

Born as a real estate attraction, the city is described by Robert A. M. Stern in the introduction to Dunlop’s (2007) *MIAMI* as the “greatest twentieth century urban invention, for its first hundred years a dream of Midwestern real estate hucksters largely inhabited by New Yorkers” (10). The local myth describes the city’s founding with Ponce de Leon’s 1513 entry into Biscayne Bay in his search for the Fountain of Youth. The city was platted in 1842, and in 1896 Henry Flagler extended the railroad and built the first tourist venue, the Royal Palm Hotel. Miami “was headed to a future as a vacationland, aided by the railroaders and hotel-builders, usually one and the same, which meant that what would later be thought of as the architecture of escapism was entirely appropriate” (50) (Dunlop 2007).

Zoning was adopted by Miami in 1934, after fifty years of building a tourist destination of hotels and attractions. Introduced and reinforced by many planning meetings in the early 1920s, the decision to adopt zoning was put on hold when the city suffered a devastating Category 4 hurricane in 1926. A ten-foot storm surge swept over Miami Beach and into Miami’s, downtown leaving 372 people dead, with damages over

⁹⁸ *Time* articles 1981 and 2006, <http://www.miamiasis.com/paradise-lost/> (accessed June 14, 2014).

\$100 thousand—estimated at over one billion dollars in today’s economy.⁹⁹ By 1934, Miami had recovered. Led by Frank Stearns, a local developer and builder, the zoning law passed and Stearns became the city’s first zoning administrator. In 1960, after over 6,000 changes to the 1934 law, zoning was repealed and a new zoning ordinance put in place for land use and building form. That law was in place until 1982, when Zoning Ordinance 9500 was approved and hailed as a model, receiving an award from the Florida Gold Coast chapter of the APA.¹⁰⁰ The 9500 law was a study in detail, taking eight years to write and then disregarded as overly complex by residents and developers. In response to the over-regulation, zoning law 11000 passed in 1990. This law was small in scope, focusing primarily on land use regulation, but increased parking requirements and setbacks. The 11000 law also offered a one-time, 25-percent-per-square-foot bonus to fund subsidized housing by establishing an additional approval fee. Planners and residents expressed surprise when the bonus became highly popular with developers.¹⁰¹

By 2000, city planners were inundated by the hyper-development that engulfed the city. Planning conflicts were rampant. The city could barely keep up with the rush to rezone, while residents were often confused by the 11000 code. The city’s website referred to the code as a “hodge-podge without regard for smart growth and quality of life.”¹⁰² Developers had “determined the code was loose,” according to then-planning

⁹⁹ Miami 1926 hurricane, National Oceanic and Atmospheric Administration (NOAA): <http://www.srh.noaa.gov/mfl/?n=miamihurricane1926> (accessed June 1, 2014).

¹⁰⁰ APA, http://www.miami21.org/Media_01112011.asp (accessed April 20, 2014).

¹⁰¹ History of Miami zoning, http://www.miami21.org/Miami_Zoning_History.asp (accessed June 1, 2014).

¹⁰² Zoning history, http://www.miami21.org/Miami_Zoning_History.asp (accessed June 1, 2014).

director Ana Gelabert-Sanchez, “It was not giving us the buildings we wanted and 30 percent of the applications were special variances.”¹⁰³ While city planners tried to work with developers, residents complained to their elected officials about the lack of neighborhood protection. Miami has long been a pro-development city but the lack of regulation, together with the surge in zoning applications, made it appear out of control.

Citing the 2005 Kyoto Protocol on climate change and the film *An Inconvenient Truth*, Manny Diaz, mayor of Miami from 2001 to 2009, responded by putting together a climate action plan, permitting LEED accreditation for buildings, installing solar panels on city hall and creating an Office for Sustainable Initiatives. When the zoning quarrels between the neighborhoods and developers reached the mayor’s office, Diaz took control and promoted New Urbanism as the most effective direction, even though it had not been implemented in a large city.

Noting that traffic, threats of hurricanes, flooding and water conservation were but a few of the problems that needed solving, Diaz set about to create a long-range plan for the city. Diaz notes that the city had a “build now, pay later mentality.” The council had voted down other attempts at a city master plan when a city-wide plan was first proposed in 1915 at a projected cost of \$1,500 and deemed too expensive (Diaz 2013).¹⁰⁴ The concept for Miami 21, Diaz’s twenty-first century plan, was further envisioned as the mayor attended meetings with the Urban Land Institute and the

¹⁰³ Gelabert-Sanchez, Ana. Interview with author. Phone interview. Miami, April 2, 2014.

¹⁰⁴ Miami City Planning history refer to: http://www.miami21.org/Miami_Zoning_History.asp (accessed June 1, 2014).

Mayors Institute of City Design.¹⁰⁵ Diaz contracted with the Miami office of DPZ to prepare a master plan to begin addressing the zoning issues.

DPZ is considered the expert on smart growth and form-based code, having developed both for CNU. The city's Miami 21 master planning team incorporated several consultants under DPZ's direction, who began by putting together master plans for each neighborhood throughout the city. Hundreds of public meetings were held, managed by Gelabert-Sanchez and Elizabeth Plater-Zyberk, partner with DPZ. Miami is well known for political gyrations, and with this backdrop Miami 21 began to receive substantial publicity throughout the country. The master plan officially kicked off in April, 2005 with a well-attended event featuring Charleston's Mayor Joe Riley, the well-versed advocate of form-based code. Diaz described the plan and code:

Miami 21 is a planning document as much as a land development regulation code. While most codes are typically prohibitive in nature (they tell what you cannot do), I wanted a code that told you what we wanted you to do. The smart growth principles of Miami 21 allow you to determine where growth will take place, promote the areas where it is meant to occur and in the process protect historic single family neighborhoods. (Diaz 2013, 170)

Diaz relates that over 500 public meetings resulted in the identification of three plan goals by the neighborhood attendees: (1) to protect neighborhoods; (2) to enhance neighborhood livability; and (3) to promote environmental and economic sustainability. The community was assured that zoning decisions would not focus on a specific parcel of land, but would be subject to neighborhood context. Additionally, zoning decisions would occur twice a year, limiting the vigilance that the neighborhoods found

¹⁰⁵ Diaz biography, http://www.citymayors.com/mayors/miami_mayor.html (accessed June 1, 2014).

themselves having to maintain as they were on constant alert for encroaching uses.

Gelabert-Sanchez describes the outcomes as an effort to “calibrate... capacity,” meaning a way to understand the limits and form of the built environment. Instead of taking away rights, new development would not be held to a use or a height limitation, but would expand the mix of uses in the higher use transects. Miami 21 defines transect as “a zone which functions more like an inclusive environment, rather than simply regulating uses (as traditional zoning).”¹⁰⁶ Plater-Zyberk describes the plan beginning as a study of “limiting the construction of condos” that Diaz subsequently evolved into a “long-term vision that outweighed short-term politics.”¹⁰⁷

Table 5.5: Miami Census Data

PEOPLE QUICKFACTS	Miami
Population	413,892
Percent change 2010 to 2012	3.6%
White alone	11.9%
Black alone	19.2%
Hispanic alone	70.0%
Asian alone	1.0%
High school grad	69.6%
College grad	22.9%
Households	151,063
Persons per household	2.60
Homeownership rate	33.8%
Median home value	\$235,800
Per capita income	\$20,886
Median household income	\$29,762
Persons below poverty level	29.5%
Travel time to work (minutes)	26.4
Land area square mile	35.87
Persons per square mile	11,135

Source: www.city-data.com/city/Miami-Florida.html

¹⁰⁶ Transect, <http://www.miami21.org/TheTransect.asp>. (accessed June 1, 2014).

¹⁰⁷ Plater-Zyberk, Elizabeth. Interview with author. Phone interview. Miami, March 21, 2014.

Miami 21 is described as a hybrid process of sustainability. Developers can propose special area plans for nine or more acres that can be presented and accepted in a public hearing. Many uses may be inserted, or regulated, into the mixed-use areas. According to Gelabert-Sanchez, the question they were most often asked by the community was to explain why the code should change. The planners answer was to communicate that Miami would become a better city by analyzing what development could do not only to advance the neighborhood or district but to enhance the entire city.

5.3.2 Adoption Decisions

Miami was the first large city to adopt form-based code. Diaz (2012, 175) envisioned “Miami 21 was designed for the green city of the twenty-first century.” The community is a highly engaged, multicultural mix of Hispanic, Haitian, Columbian, and white ethnicities along with numerous religions and economic strata as listed in Table 5.5. Miami 21 became a hyper-charged process to change the entire zoning code, with extensive community involvement. DPZ worked with each neighborhood to determine regulation and transect plans for each portion of the city, while taking great caution not to regulate style. The “transects had to be clean” and neighbors had to be “able to open the code and know what it is” according to Gelabert-Sanchez.¹⁰⁸

The decision to put the plan in place at one time instead of piecemeal by neighborhood, as in Cincinnati and Nashville, required extensive discussion. The discussion came down to two elements: first, the city’s status as a regional municipality; and second, the anticipation that the time to approve the entire city section by section

¹⁰⁸ Gelabert-Sanchez phone interview.

could take decades. Additionally, the impossible task of managing development under two codes—a new form-based code in some neighborhoods and the 11000 code in others—drove the decision to implement the new code. Diaz decided it would be messy to accomplish a one-time change, but planning and zoning had become a complicated and political conundrum that could not be tolerated any longer. The Coconut Grove area had “23 kinds of zones and each project was basically guaranteed an overlay.”¹⁰⁹ With a community agitating for change, Diaz decided to move ahead with a full-city code change.

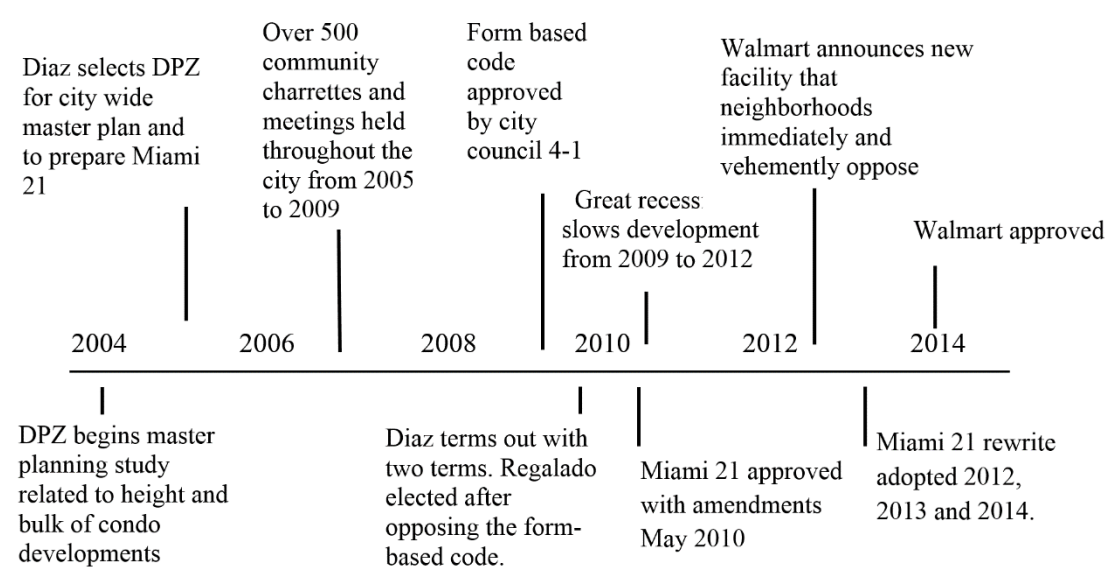


Figure 5.4 Miami 21 Time Line

As with many communities, Miami has a multitude of volatile factions. As occurred in Cincinnati, and perhaps as surprisingly, it was architects who would try to derail the form-based approach. At the outset, the Miami Chapter of the American

¹⁰⁹ Plater-Zyberk phone interview.

Institute of Architects (MAIA) was supportive of the new code, but as the charrettes and public meetings wore on, the architectural community became less interested in a master design guideline for the city. The architects were united in their objection to what they perceived as a heavy-handed, dictated form for their buildings, or having to abide by a “picture book of design” (Berg 2010). The conventional designs that CNU prescribed in their websites and publications were not up to standards in a city that believes it is the trendy epicenter of contemporary architecture (Schulman, Robinson, and Donnelly 2013). That the Form-Based Code Institute (FBCI) received funding from Richard Driehaus, a philanthropist who supports classical and Urbanist projects, caused further concern among the architects.¹¹⁰ Miami 21 received the Driehaus Award in 2010.¹¹¹

5.3.3 Implementation

With Miami 21 approved by a four to one commission vote on September 5, 2009, the community believed the new zoning code was approved and in place. Not surprising to the political elite, one month later the new mayor, Tomás Regalado, put the new code on hold so the law could be reconsidered. Regalado was the single negative vote on the five-member commission. He had defeated former commission member Joe Sanchez in the mayoral race; Sanchez had voted in favor of Miami 21. Subsequently, and unrelated to form-based code, two commissioners were removed due to corruption charges, and their elected replacements sided with Regalado against the new code. The remaining member Mark Sarnoff, a code supporter, became commission chair. Neisen

¹¹⁰ Driehaus prize for classical architecture awarded through the University of Notre Dame School of Architecture, <http://architecture.nd.edu/about/driehaus-prize/> (accessed June 1, 2014).

¹¹¹ The Form-Based Codes Institute (FBCI), <http://www.formbasedcodes.org/miami-21> (accessed April 23, 2014).

Kasdin, local land-use lawyer and former Miami Beach mayor, expressed the supporters' alarm: "I would be concerned that a short-term delay could turn into a longer delay, and then a permanent delay" (Viglucci and Rabin 2009).

Miami Neighborhoods United (MNU), an 18-neighborhood group formed in 2009, proclaimed its intent to protect neighborhoods from alleged up-zoning by stopping the new code. Their main goal was to limit height to 35 feet along the street corridors, where they transition to single-family zoning. MNU supported the newly elected council members against Miami 21, and were strong supporters for Mayor Regalado.¹¹² Ninety days after putting the new code on hold, and after numerous attempts by what the *Miami Herald* referred to as a "concerted behind the scenes blitzkrieg of developers' lawyers who have long sought to scuttle the law," Regalado determined the law would stay in place—primarily due to the fifteen new ordinances it would take to repeal the measure (Viglucci 2010, Rabin 2010). Proponents breathed relief that Miami 21 would proceed. Several amendments by MNU later, the plan was officially put in place in May 2010. That is not to say there is no residual distress regarding its implementation, even though it received several awards;¹¹³ MNU was filing lawsuits through 2013. Miami was hard-hit by the economic downturn caused by the Great Recession. With development on hold, residents, elected officials and planners had time to rework their law and forms to implement Miami 21 once the economy returned. The economic downturn gave the planning office the opportunity to revise and clean up questionable code issues.

¹¹² Miami Neighborhoods United (MNU) comments regarding amendments to Miami 21, http://www.miami21.org/PDFs/support/MNU_Blue-White_Paper.pdf (accessed April 20, 2014).

¹¹³ On January 15, 2011, the *Miami Herald Opinion* page led with Good for Miami, reporting the APA awarded Miami 21 a Best Practice award http://www.miami21.org/Media_Headlines/TMH20110115-Editorial.pdf (accessed April 1, 2014.)

Residents complained that the new code bypassed public input. Consequently, when the code was adopted in April 2010 Mayor Regaldo, in an about-face, called Miami 21 a living document subject to tweaking.¹¹⁴ Volume 1 of the code was amended by City Council in April 2012, April 2013, and again in May 2014.

The new code is organized with the categories of “By Right, Waiver, Warrant, Exception, Variance or Zoning Change,” and the several steps for the latter five choices, as illustrated in Figure 5.5. “By right” is the primary choice among developers for parcels with generous pre-Miami 21 designations. Evidence of this preferred status is the April 2014 sale of 1.5 acres downtown, which garnered \$17.37 million, almost double what the owner paid for it (\$9.5 million) in 2006. This downtown site is located at 1080 Brickell Avenue and while it is less than one block from the monorail Metromover station, what makes the property valuable according to the developer is that it retains the 2006 city zoning rights that allow more density.

¹¹⁴ Miami 21 latest adoption, <https://mail.google.com/mail/u/0/?tab=wm#inbox/148752a2983930f3> (accessed September 13, 2014).

MIAMI 21
AS ADOPTED – MAY 2010
ARTICLE 7. PROCEDURES AND NONCONFORMITIES
DIAGRAM 14 PERMITTING PROCESS

PERMITTING PROCESS DIAGRAM

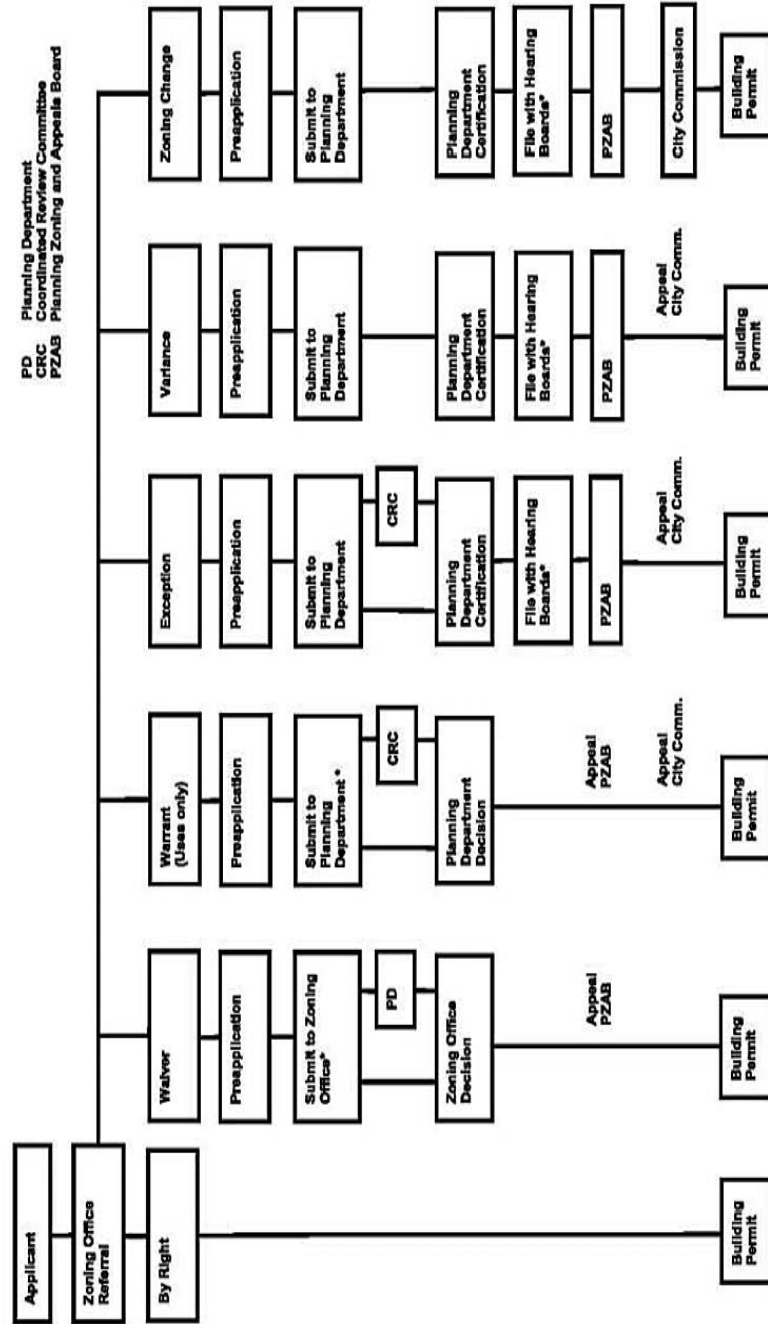


Figure 5.5 Miami 21 Permitting Process Organization

Source: "Article 7. Procedures And Nonconformities; Diagram 14 Permitting Process". In Miami 21 viii, Miami FL, 2010.

The land is zoned and still claims by right the classification to build the Bond at Brickell, a 44-floor condominium tower with 5,000 square feet of retail and parking, through the designation as a “major use special permit,” or MUSP. The MUSP zoning expires in 2014, and the owners will need to have their building permit in hand, or will have to seek new approval from the city under the Miami 21 code—resulting in a lower height limit of 35 stories and less net square footage.¹¹⁵ The Bond is advertised as the “first new condominium to be developed on Brickell Avenue since Miami’s last real estate cycle.”¹¹⁶

The Planning and Zoning office reports the city has 31 large-scale projects in construction, 75 large-scale projects under discussion and 31 projects they understand are in planning and anticipating meetings. The city has 6,000 residential units and one-half million square feet in retail use under construction, a promising turnaround from 2009 in this boom-or-bust city. In 2004 the *Wall Street Journal* reported a 22,000-unit glut of new condos and apartments in the city, following an intense building boom in 2006 when prices exceeded \$400 to \$500 per square foot. The recession caused Related, the premier Miami developer, to turn over two of its three Icon towers to their lender when the prices for condos were cut in half, which caused buyers to drop their contracts.¹¹⁷ The lagging condo market struck a number of large cities, including Atlanta

¹¹⁵Brickell site, <http://www.savigroup.com/news/developer-sells-brickell-site-for-nearly-double-2006-price/> (accessed April 20, 2014).

¹¹⁶ The Bond at Brickell, <http://www.bond1080brickellavenue.com/#!factsheet/c1nly> (accessed April 22, 2014).

¹¹⁷ *Wall Street Journal* http://online.wsj.com/news/articles/SB10001424052970203707504577010331369486386?mod=googlenews_ws_j&mg=reno64-wsj&url=http%3A%2F%2Fonline.wsj.com%2Farticle%2FSB10001424052970203707504577010331369486386.html%3Fmod%3Dgooglenews_ws_j (accessed April 20, 2014).

and Denver; however Miami, with its large inventory, became the poster child for empty buildings.

Luciana Gonzalez, assistant director City of Miami Planning and Zoning Office, states that the big turn-around in permitting occurred in January 2013, when the city was surprised by a surge in permit applications.¹¹⁸ Figure 5.6 illustrates the permit roller coaster and the 53 percent drop in permits from 2007 to the start of the Great Recession in 2010, and former Zoning Ordinance 11000: with 402 permits in 2007; 357 in 2008; 320 in 2009; and 190 in 2010. Warrants issued are 189 in 2010; 66 in 2011; 64 in 2012; and 90 in 2013. 42 warrants have been issued through August 2014. Waivers issued include 14 in 2010; 61 in 2011; 94 in 2012; 73 in 2013; and 87 through August 2014.

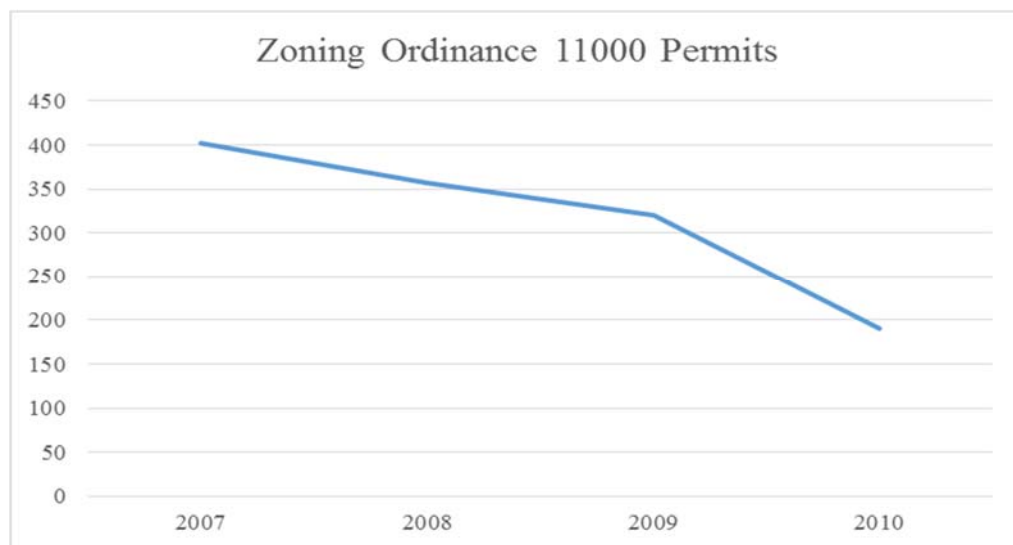


Figure 5.6 Zoning Ordinance 11000 Permits from 2007 to 2010

Source: <http://www.miamigov.com/planning/notifications.html> (accessed April 12, 2014). Graphic by author.

¹¹⁸ Gonzalez, Luciana. Interview with author. Phone interview. Miami, April 16, 2014.



Figure 5.7 Warrants Review by Planning Director from 2010 to August 2013

Source: <http://www.miamigov.com/planning/notifications.html> (accessed September 12, 2014). Graphic by author.

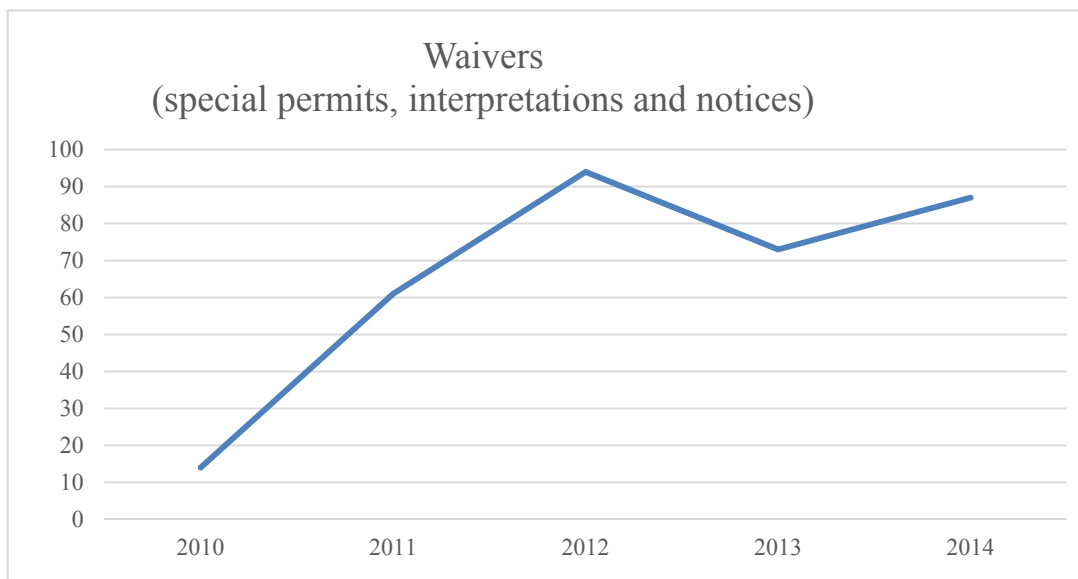


Figure 5.8 Waivers Issued in Miami from 2010 to August 2014.

Source: <http://www.miamigov.com/planning/notifications.html> (accessed September 12, 2014). Graphic by author.

5.3.4 Outcomes

Transparency

In return for their approval of Miami 21, the neighborhoods have transparency regarding planning information. Gonzalez, Gelabert-Sanchez, and Plater-Zyberk report that the feedback for the information offered on the Miami Planning and Zoning website (<http://www.miamigov.com/planning/>) is positive. Gonzales states the department is working on additional tools to keep the process transparent and to inform the residents of real-time meetings, hearings and results. Additionally, the office is adding more GIS (Geographic Information System) layers to provide information, so that the tools can be yet more interactive and informative. The staff is available to meet with the communities regarding changes to the code in their area at their preference, so that the staff is as proactive as possible in implementing the new Miami 21 code.

Predictability

Plater-Zyberk and Gelabert-Sanchez described the extent of planning through charrettes and meetings that resulted in the transect design in each neighborhood. Each neighborhood designed their community master plan in order to express what was essential to the neighborhoods throughout the process, and to predict the results of the neighborhood vision. The neighborhoods are content with the process. Problems occur where a plan is implemented that was “grandfathered” from the Zoning Ordinance 11000. When these older plans suddenly come back to life, the neighborhoods are forced to work against the hold-over permitted plan, as with a recent Midtown Walmart rezoning. Neighborhood and elected officials clashed over a proposed in-town Walmart. The big box store has incited community outrage over zoning in Chicago, Atlanta,

Sarasota and Los Angeles. Miami is subject to a long-standing Walmart development conflict on Miami Avenue. Appendix C of the Miami 21 code includes the original overlay that is one of the hold-overs from the 11,000 zoning code, the Midtown Miami Special District: a 38-page plan for the Midtown Overlay District that is a condominium and retail center. The location includes many big-box retailers and has a prescribed plan for linear frontage referred to as a “liner” of smaller retail and restaurant uses.

Walmart had originally considered purchasing the site several years ago, prior to the recession. However, Walmart recently closed on the property at 3055 North Miami Avenue in January 2014, for \$8.2 million. The 203,000-square-foot building, with a three-story height limitation, is controversial because there is a lack of transition between the big-box structure and the adjoining single-family neighborhood. The 577 parking spaces and the several loading bays on a site between Northeast 29th and 31st Streets was approved in January, 2014, and permits are under discussion regarding amendments currently in negotiation. The neighbors believe they have been ignored, and that zoning predictability as laid out in their Miami 21 regulating plan is not recognized in their community.¹¹⁹ As illustrated in Figures 5.9 and 5.10, the neighborhood is objecting to the lack of transition between their one-story residences and the big-box retail. Walmart construction is on hold while the neighborhood continues the court case and their more than four-year battle to stop construction.

¹¹⁹ Walmart, <http://www.miamiherald.com/2013/10/02/3666181/walmart-opponents-make-case-before.html>, and, http://blogs.miaminewtimes.com/riptide/2013/08/city_approves_walmarts_plans_f.php (accessed April 20, 2014).



Figure 5.9 Neighborhood located NW 31st Street located across from the site of the Walmart proposed for the corner of NE 29st and 31st Streets



Figure 5.10 Proposed Walmart location at 3055 North Miami Avenue (photo by author).

Miami scores high in a recent walkable cities ranking: number five, behind New York City, San Francisco, Boston and Philadelphia, according to Walk Score® 2014 City and Neighborhood Ranking.¹²⁰ Gonzalez states that one of the main goals of Miami 21 was to make the city “walkable.”¹²¹ This new designation contributes to the reputation the city is attempting to build as the example of New Urbanism and form-based code. Another measure of walkability, and further justification for their change to form-based code, is a new *Measuring Sprawl in America 2014* index that lists Miami as number eight of the cities with the least sprawl in its comparison of 221 major U.S. cities. The list is scored by development density, land-use mix, activity centering and accessibility.¹²²

Gonzalez and Gelabert-Sanchez report that they are not seeing a time or cost differentiation attributable to the new code change. They are convinced the waivers and warrants system takes less time and offers the “predictability” index they hoped to achieve. There are other considerations that take time, such as the Walmart permit in Midtown Miami that was due to the former pre-existing zoning overlay. They are convinced that the charrette format used to determine that transects promotes “predictability” and is the correct format to determine and define the final transects and code. The process is referred to as “NIMBY-resistant” by Carol Wyant of the Form-Based Codes Institute (FBCI): “The code is really a tool to implement the vision that everyone has agreed upon. So it’s more time- and labor-intensive up front, but once

¹²⁰ Walk Score® is located in Seattle, WA, <http://www.walkscore.com/cities-and-neighborhoods/> (accessed June 1, 2014).

¹²¹ Gonzalez, Luciana, Ibid.

¹²² Smart Growth America, <http://www.smartgrowthamerica.org/documents/measuring-sprawl-2014.pdf> (accessed April 20, 2014).

everyone’s agreed on the vision, then the rules are very clear and the process for development goes much more quickly,” claims Wyant. “There don’t have to be public hearings, and the NIMBYs don’t have to show up, because the project conforms to the vision everyone’s agreed upon (Berg 2010).

Table 5.6: Miami Summary Issues and Results

MIAMI SUMMARY		
	ISSUES	RESULTS
CONTEXTUAL FACTORS	Neighborhoods want measured development while controlling building design and use. The 11000 code had multiple changes and overlays.	Mayor Manny Diaz and his administration decide to proceed with city-wide adoption of form-based code.
ADOPTION DECISIONS	Mayor Diaz, Elizabeth Plater-Zyberk of DPZ and Ana Gelabart-Sanchez, planning director, lead the adoption.	New code passes 4-1, Diaz terms out and Regaldo, the one negative vote wins election. Code was on hold until adopted with provisions six months later. Revised in 2012, 2013 and 2014.
IMPLEMENTATION	Hybrid code in force.	Mixed results as several areas have pre-code zoning and some overlay districts remain in place. Code cleanup and rewrite adopted in 2013.
OUTCOMES	Areas with in-place regulating plans are proceeding with warrant approvals.	Miami is adjusting to new code. Mixed reaction to the new code in the neighborhoods, some winners (downtown) and losers (design district) regarding enacting regulation.

5.4 ADOPTION CONCLUSIONS

The approval of form-based code from conventional Euclidean zoning in these three cities identifies three issues. First, form-based code is highly dependent on local conditions. As discussed, conventional zoning is local; likewise, the change to form-based code is ultimately dependent on the community's needs and desires. Second, form-based code is adopted in a variety of ways. In Cincinnati, it is with regulating plans approved by three neighborhoods and then adopted by city council. Denver adopted their hybrid code incorporating conventional zoning and placeholders for recognized and influential business districts such as Cherry Creek to approve their plan. Third, high-level leadership is important to code change. In Denver, the mayor-appointed advisory committee assisted and directed by the planning director led the change. In Miami, the mayor was the powerful force for approval and adoption. Cincinnati's vice mayor (Qualls was also a former mayor) was the leadership force for initiating the funding, process and approval in that city.

Leaders in each community had determined there was some particular failure of Euclidean zoning to satisfy the type of new or redevelopment they envisioned for their community. Whether it was lack of design, walkable aspects of neighborhood, lack of economic development, cumbersome regulations, or other negative issues, each community believed that they needed to change their zoning. Cincinnati vice mayor Qualls, an early advocate of CNU and form-based code zoning, believed the anticipated new design code would attract development to the neighborhoods and the downtown. Denver's former mayor Hickenlooper, looking ahead to future growth, appointed the advisory committee to rewrite an outdated 1950s code and envision a new direction for

zoning the 21st-century city. Miami's former mayor Diaz hired DPZ to oversee the process and adoption of form-based code in response to a surge of controversial zoning changes that overloaded the planning office and frustrated the neighborhoods. The motivations and responses to implement form-based code are as varied as the code each city ultimately adopted.

There is, however, commonality that motivated the zoning code changes in Cincinnati, Denver and Miami. These common elements are summarized as desires to:

- (1) Improve the communities by adding design regulations and reducing their current cumbersome code;
- (2) Educate the community;
- (3) Build constituency among the community;
- (4) Attract quality development; and
- (5) Streamline permitting.

The resultant form-based code established the local planners as the go-to professionals to implement the zoning and growth the city would need for a new century. In other words, it was time to act. Each of these codes began pre-Great Recession, when markets and economics were at a high point. In his October 2010 Planetizen interview, Peter Park explains planning practice in comparable terms to Friedmann and Forester:

As planners we're constantly balancing the ideals of the planner, the views of the profession and values that you hold personally, with those of the community. We have the opportunity to influence the community's point of view. And then again, if planners educate the public, then they help to raise the bar of expectation in a community. Now, how does that begin then to translate to policies?¹²³

The bar of expectation is raised in three Cincinnati neighborhoods and in the cities of Denver and Miami.

¹²³ Peter Parks, <http://www.planetizen.com/node/46586> (accessed September 2, 2014).

CHAPTER 6

CONCLUSIONS

This investigation is the first research into why and how communities change their zoning from conventional Euclidean to form-based code. The research examines planning practitioner responses to survey questions regarding the adoption and effects of form-based codes in their communities in order to examine the impact of the code change. The intent is to further discover the intersection of planning practice and theory by studying practitioners' and the theories that inform or follow the practice.

Issues critical to an examination of the theory and practice aspects of this investigation include key questions: **What motivates change? What difference does it make? Who are the primary leaders for change? What do comparative analyses show about the basis for change and the impact of form-based code?**

Rangawala, a form-based code advocate and practitioner, offers his realistic account of how form-based code works, along with the issues related to selling and implementing the new code. He suggests planners return to their foundation as a design profession: "Planners should reclaim their heritage in physical planning and design." He further explains why too much pressure to adopt the new code may not be constructive:

FBC practitioners should refrain from overselling FBCs. It's only a tool — not a panacea for the absence of good planning. Overselling hurts the product, as focus shifts to what it cannot do versus what it can do. People resist agenda-driven influences, if offered "fixes" they do not want or need. It's more effective to influence than persuade. Our focus is to inspire lasting buy-in and commitment by painting a picture of a better place. In addition, practitioners must be prepared for lengthy follow-up sessions with implementing staff. (Rangwala 2013)

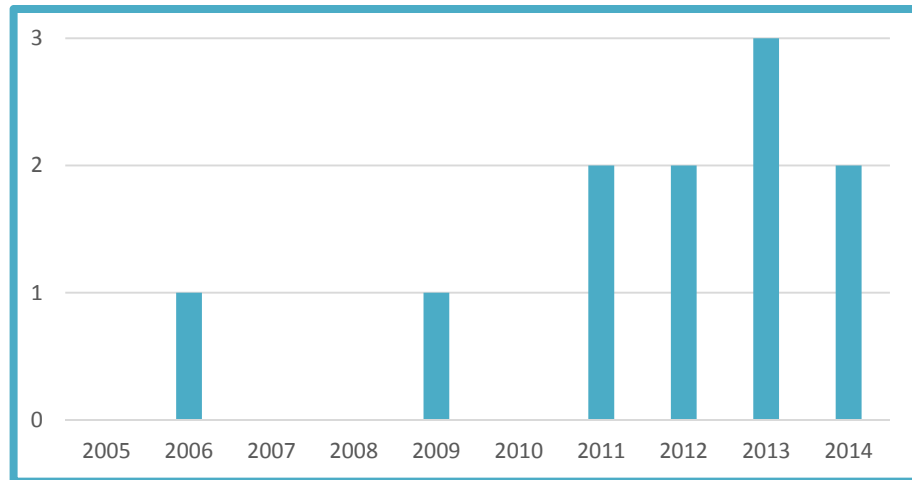


Figure 6. 1 Academic Articles Published by Year 2006 to 2014

Since 1993, there have been at least 11 juried articles regarding the specifics of form-based code published in academic journals (Figure 6.1).¹²⁴ The subjects of the articles range from walkable streets to reduction in greenhouse gas emissions and New Urbanism. Yet, there is minimal fact-based documentation extant regarding form-based code. To date there has been no quantitative research into how practicing planners perceive the new code or how it is working. Current assertions regarding the performance of form-based code are more often anecdotal rather than based on a comprehensive analysis.

6.1 Overview of Study Results

The change from Euclidean zoning to form-based code is a process that is documented through this survey. Additionally, the survey offers recorded comments regarding the substantial commitment to community dialogue, extended time to work through the approval process to adopt the new code and costs in terms of consultants to

¹²⁴ VantagePoint text mining software <https://www.thevantagepoint.com/> (accessed November 11, 2014).

facilitate the adoption.¹²⁵ The process, time and cost issues for form-based code implementation are important to examine in order to assess the success of the new code. Case studies from Miami, Denver and Cincinnati offer the qualitative descriptive research of contextual factors, adoption decisions, implantation and outcomes. The conclusions drawn from the research are derived from the survey respondents and case studies with the intent of expanding the literature regarding form-based code and the future of zoning.

6.1.1 Primary Findings

The following list of findings is a result of the practitioner survey and further documented from interviews from planning leaders in Cincinnati, Denver and Miami, who offered their informative views on the process and effects of implementation in their cities.

These findings are discussed in more detail throughout this chapter. The results are based on survey data gathered at the end of the Great Recession, and the relatively slight effects of code change revealed by the survey likely reflect this economic zeitgeist. In the future, results of similar surveys might well be influenced by a positive change in economic conditions or more time to enact changes made to local codes in surveyed communities. . Results include these findings:

(1) Form-based code is not replacing conventional Euclidean Zoning.

The new form-based code is important to the communities who have adopted it, but it is not sweeping the country as zoning did 100 years ago.

¹²⁵ Although questions regarding cost information were not included in the survey several respondents offered information in their narrative responses.

In fact, .003 percent (279) of the 88,000 local governments have adopted form-based code. The APA states on their website that “It seems the country has gone head over heels for form-based codes,”¹²⁶ but that assertion is not borne out by the results of this research.

- (2) Dedicated leaders are essential to change to form-based code.** The survey results indicate that adoption of the new code is greatly enhanced by passionate, top-level leadership including elected leaders and planning officials.
- (3) Communities change their code primarily to encourage development and foster better design.** Respondents were clear that anticipation of development and improved design were their primary reasons for code change as illustrated in Table 4.5.
- (4) This research indicates that to date there has been no proven positive effect from the adoption of form-based code is shown to reduce the amount of public process, time required, or cost of zoning, or to increase the number of zoning applications.** Results of the survey indicate there is virtually no impact in regard to the zoning change. Table 4.4 illustrates that 44.7% of respondents believe there is no impact on the time required to approve new zoning, 44.4% indicate no impact for cost and 40.7% no impact on public process. Figure 4.25 illustrates that 75 percent (75 out of 93 respondents) said there was not much or no impact in the number of zoning applications submitted. Again, this response

¹²⁶ American Planning Association website, <https://www.planning.org/cm/search/event/?EventID=17539> (accessed November 11, 2014).

could very well be an effect of the lingering economic downturn of the Great Recession.

6.2 What Motivates Change?

Miami was motivated to manage hyper-development and reduce neighborhood conflicts; Cincinnati's goal was to encourage development that adheres to the specific vision for each neighborhood; and Denver wanted to make sense of an outdated zoning code. Because zoning is always local, each city has unique reasons for changing their code. This research identified two primary motivations for communities to adopt form-based code. First is to encourage new *development*, which ranked highest in the survey as shown in Table 4.5. *Better design* ranked second; third, the *ease of the approval process* and fourth, *predictability*.

Interviews with planning leaders in Cincinnati, Denver and Miami illustrate that a shared reason why each city changed from conventional zoning to form-based code was their dissatisfaction with complicated, outdated and cumbersome zoning codes, dating from the 1950s in Denver to the 1980s in Miami. Those interviewed noted that the old codes meted out a complicated zoning process that was widely known to frustrate the community in terms of time, cost and outcome.

The anticipation of “predictability throughout the zoning process” was mentioned often throughout the surveys and interviews as an expected outcome of the change to form-based code. Fundamentally, communities, local planners and elected officials desire stability in the zoning process. A respondent from a suburb of one of the case study cities noted: “The form-based code succeeded at changing the way our city

looked at new developments. Although there has not been much progress with new developments, when new development does come it will be constructed in a form that is more harmonious to the historic character of the city.”

6.2.1 From One Page to 1000

The complexity of conventional zoning codes is frequently mentioned by survey respondents and throughout the literature. Conventional zoning did not begin with hundreds of variances. From the establishment of zoning, it was understood that it was a fluid arrangement. The 1926 revision of the Standard State Zoning Enabling Act (SSZEA) stated: “It is obvious that provision must be made for changing the regulation... as new conditions arise. Otherwise zoning would be a “strait-jacket” and a detriment to a community instead of an asset.” A 1958 Planning Advisory Service (PAS) reported that zoning variances are necessary because “even the best zoning ordinance become out of date.”¹²⁷ Over the years, the formalities and red tape associated with variances and amendments become routine in some cities. Before their new 2011 code was adopted, Philadelphia was the epitome of bureaucracy, with over 40 percent of all projects brought before the zoning board each year requiring a variance.¹²⁸ In 2002, before Chicago’s new code was adopted in 2004, the city was processing almost 1000 zoning variances a year.¹²⁹ “FBC is every bit as hard to apply as conventional code. It has more clarity in some ways, but it's still extremely complex. People still need

¹²⁷ American Society of Planning Officials, 1958 <https://www.planning.org/pas/at60/pdf/report115.pdf> (accessed August 20, 2014).

¹²⁸ Fate of new Philadelphia zoning code is uncertain http://articles.philly.com/2011-09-14/news/30154621_1_zoning-board-new-code-zoning-board-cases, (accessed August 28, 2014).

¹²⁹ Before the new Chicago zoning code <http://www.metroplanning.org/multimedia/publication/234> (accessed August 28, 2014).

variances,” stated a survey respondent from suburban Illinois. Would form-based code be different? As previously discussed, the original 1992 Seaside code, referred to as a “poster code,” was a one-page design guideline without a municipal code attached, as illustrated in Figure 6.2.¹³⁰ In actuality, it was not a code at all, since Seaside was primarily a resort and second home community, not an incorporated city. Ironically, the form-based codes adopted in Miami and Denver comprise a complicated list of design elements, including such detail as regulation for permanent and temporary signs. The entire code for each city is almost one thousand pages.¹³¹

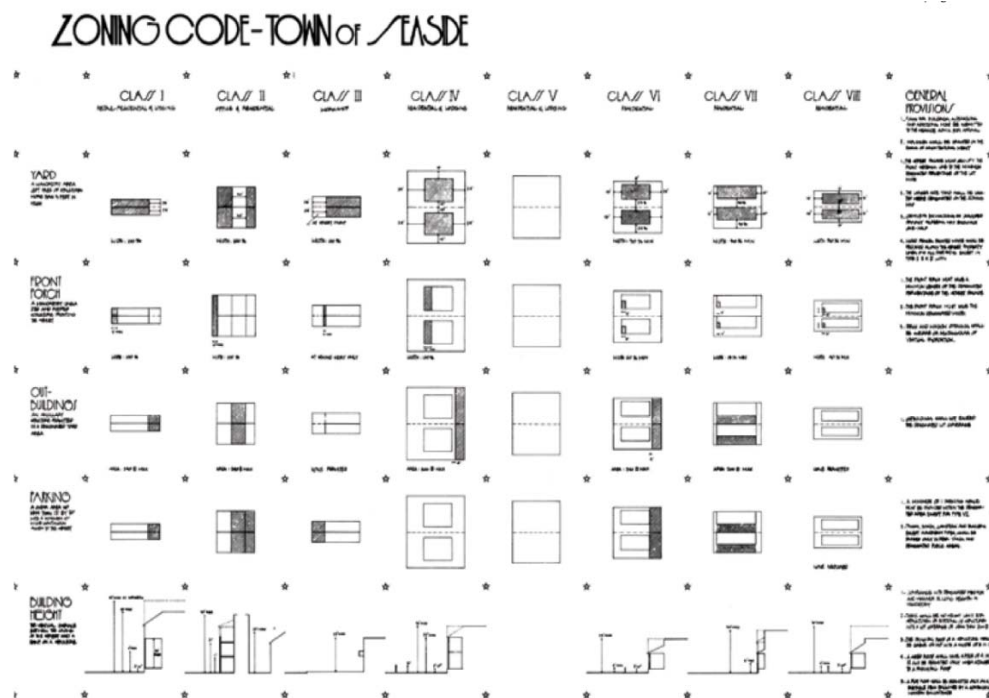


Figure 6.2 Seaside Form-Based Guidelines 1992

Source: http://www.fltd.com/research/about_form_based_codes/form_based_codes.pdf

¹³⁰ Seaside form-based code 1992 in article by Bill Spitkowski, http://www.fltd.com/research/about_form_based_codes/form_based_codes.pdf (accessed September 16, 2014).

¹³¹ Miami 21 zoning code http://www.miami21.org/final_code_May2014.asp (accessed September 17, 2014).

The “formers” consider the new design codes a pleasure to review, in large part because of their graphic illustrations. The “zoners” in the architecture community consider the new code to be an albatross of design jargon and regulation.

6.2.2 The Jury is Out

Planners from the communities surveyed note that it is too early to determine the effects of their change to form-based code. Of the 64 comments, 58 of respondents stated that it is too early to determine whether their new code was achieving its intended goals. “The jury is out,” is the comment best representing the consensus of 90 percent of the recorded comments. Case study interviews, particularly in Denver and Cincinnati, also note that it is too early to determine the effect; in Denver because the projects underway are primarily in grandfathered overlay districts, and in Cincinnati because they remain in a slowdown attributed to the Great Recession. Glaeser (2012) notes that Miami continues to boom, with plenty of zoning applications for condominium and mixed-use developments. He attributes this in large part to “selling second homes to the rich of Latin America” (232).

The comments among planners surveyed indicate that it is too early to assess impact; that the new code “involves detail” in regard to plans; and that “staff (are) trying to understand it and become familiar with it.” Planners in Denver and Miami reinforced this theme, commenting that the Great Recession allowed city planning departments to reassess and reorganize their forms, processes for approval, and web sites. The recession produced the time that was perceived as necessary for completing and adopting the process. One planner responded, “This survey will be more useful to you in about

another year, after both municipalities have some experience in administering it. I'm sorry not to have much more to report.”

With a lack of zoning applications to review due to the economic downturn, planners had additional training in the new codes. One downside of the Great Recession, as discussed in the APA 2013 panels and by several respondents, was that planning departments lost personnel due to downsizing and resignations. Turnover of planning staff caused a lack of historical perspective regarding the approval and implementation of the new codes. Consequently, a lack of understanding of the new code necessitated continual education of the staff and the public, which resulted in a supportive constituency.

6.3 The Impact of Form-Based Code on Zoning

The FBCI notes that only .003 percent of the estimated 88,000 cities and counties (or slightly over 300 locations) in the U.S. have approved form-based code. Proponents of the new code, including architects and planners, anticipate that this number will increase. The adoption numbers indicate that since 1990, form-based code has become only slightly more widespread. It appears that form-based code is much slower to find acceptance than Euclidean zoning was in the early 1900s. Euclidean zoning was described by Toll (1969) as exhibiting “phenomenal” growth that “swept the nation in the 1920s” (188). There is no evidence to illustrate that form-based code is exhibiting fast or even moderate growth. Alternatively, this new code is receiving careful review in communities prior to acceptance among planners and architects. Reasons for this slow growth follow.

6.3.1 The Two Things People Hate: Density and Sprawl

As discussed in Chapter 2, central place theory and Geddes's cross sections are considered the foundation for transect design—a required element of form-based code along with the regulatory plan. These determine the number of units per acre, or density. Form-based code does not specify density in some T-zones, rather describing the code as low-, medium-, or high-density. Several survey respondents mentioned density and sprawl—ironically, both issues the community abhors.

Specifics are hard to determine in the higher T-zones. The T-6 Urban Core Transect illustrates 12 units per acre in the SmartCode®.¹³² The T-1 through 5 codes generally include densities from one to five units per acre relative to the T-zone. Density is hard to identify in form-based code urban locations. Rather, “formers” note that the code abhors sprawl, which is commonly believed to be a result of conventional zoning.¹³³ Many form-based code developments are primarily built on greenfield sites, and could be construed as sprawl. Discussions of density and sprawl are emblematic of contentious public process, and as difficult in a form-based code charrette as with conventional zoning.¹³⁴ From a northeastern city planner: “Elected officials liked the fact that they could predict how the development would appear. Anti-development advocates said that it would accelerate growth, unwanted urban densities and sprawl.”

¹³² Form-Based Code: A Step by Step Guide for Communities <http://formbasedcodes.org/content/uploads/2013/11/CMAP-GuideforCommunities.pdf> (accessed September 17, 2014).

¹³³ Michigan Municipal League, Smart Growth Tactics http://www.mml.org/pdf/map_article_issue28.pdf (accessed September 18, 2014).

¹³⁴ The Two Things People Hate Density and Sprawl <http://www.planetizen.com/node/30508> (accessed August 18, 2014).

The discussion extends to planning offices, as indicated by this comment from a planner in a large regional government planning office:

There are multiple perspectives regarding density and by-right development even within the planning department. The process was highly affected by the need for education to establish a baseline of knowledge and a more important need to craft a workable FBC in a planning context that precludes unified codes per state enabling legislation.

6.3.2 Delegation of Power

Collaboration and consensus-building are described as fundamental to the production of the regulating plan. Charrettes are facilitated to assemble the community to identify T-zones and prepare the regulating plan. Once the regulating plan is established and approved, it becomes the established pattern for development. Changes to the plan, described as warrants and waivers, are administered by the planning officials, usually the director. The community may have input into decision-making in regard to the warrants and waivers, but the final decision is determined by planning officials. Some community members protest that this limits information and bypasses public consensus, subjecting the community to loss of control while relegating power to local planning officials. One Midwestern survey respondent commented: “Staff is approving multi-million dollar projects by right with no Planning Commission, BZA or City Commission review. We also incorporated performance-based standards to insure compatibility of uses in mixed use areas which has been effective.” This may be frightening to a community; for example, Miami residents were reticent to give up this oversight. As discussed in Chapter 5, their planning office is obligated to list warrants and waivers on the city website monthly in an effort to keep residents informed.

6.3.3 New Urbanism versus Old Urbanism

As discussed in Chapter 2, the political and business elite have historically determined land use and locations for retail, housing, institutional and industrial uses. Industry and jobs were of primary importance to city-building. Conventional zoning is cited as segregating land uses, moving people further from their jobs and locating them to “drive till you qualify” neighborhoods.¹³⁵ The results are sprawl, long commutes and high costs for infrastructure.

Old urbanism includes cities such as Flint, Lansing, Akron, Cincinnati, Syracuse, Buffalo, Utica and numerous others throughout the rust belt. These cities had mixed use with corner stores, built on grids with parks and mixed income housing. They were close to—and in some cities—walkable to jobs. The demise of these Old Urbanism localities is well researched and publicized regarding jobs, industry and residents abandoning the city. New Urbanism is not a panacea for development; however, each of the case study cities is interested in New Urbanism and form-based code to attract development. Survey respondents from comparable cities remarked that while their primary interest is development, it will be hard to attract it. One planner stated:

The County's bankruptcy and ongoing sewer debt crisis will have a substantial effect on its use and effect. As development begins to occur again we may see a higher density type of development which is well suited to this type of ordinance, but the jury is still out as no large scale development of any kind has occurred for nearly 5 years.

Social justice issues prevail in both Old and New Urbanism cities. Conventional zoning has advanced policies for affordable housing, incentive districts and innovation

¹³⁵ Rethinking the 'Drive Till You Qualify' Life, <http://www.nationalmortgagenews.com/blogs/hearing/Rethinking-Drive-Till-You-Qualify-Life-1039273-1.html> (accessed September 18, 2014).

districts. Form-based code has guidelines for mixed residential uses that include affordable housing. However, affordable housing is hard to implement without specified legal requirements. While leading a tour of Seaside's town center, developer Robert Davis commented that the second floor apartments over the shops were originally intended to be low income housing. Unfortunately, due to demand the units were rented as market-rate. A similar situation occurred in Celebration when the garage apartments were rented at market rate rather than subsidized rents. Unless there are mandated set-asides for affordable housing, it is often overlooked in lieu of market forces adding to wicked problems.

6.3.4 Sustainability or Walkability?

The protocols in this research did not specifically seek evidence of sustainable design in the implementation of form-based code. Further research should include questioning the impact of the new code on sustainability because it is a major discussion topic among formers and zoners. Form-based code advocates walkability and higher density (Duany and Talen 2013). On-line data suggests that the new code better prepares communities to value and understand the elements of sustainability, as noted on the FBCI website:

Form-Based Codes are, by definition, sustainable. Their capacity to produce compact, mixed-use urbanism makes them an essential tool in efforts to create sustainable communities. The 2&1/2 hour recorded webinar covers the key elements of sustainable design that may be regulated by form-based codes, including renewable energy systems, storm water and wastewater conservation, urban agriculture, green roofs, landscaping, community-based transportation, and others. Instructors use specific case studies to illustrate these elements, drawing upon their work from across the country.¹³⁶

¹³⁶ Integrating Sustainable Design In Form-Based Code <http://formbasedcodes.org/webinars/integrating-sustainable-design> (accessed November 12, 2014).

Other relevant examples include Miami 21, Section 3.12, which refers to sustainability and LEED Silver certification for buildings over 50,000 square feet in T-5 and T-6 zones.¹³⁷ Denver's 2014 zoning code refers to sustainability on page 1.1.1, stating the intent is a "prosperous and sustainable future."¹³⁸ However, specifics regarding LEED are not found in the current 1158-page code. LEED is not referred to in Cincinnati's current zoning code but Section 1703.6 specifies creating walkable neighborhoods.¹³⁹

6.4 Politics as an Art: Who Motivates Change?

Planners are the primary motivators, as reported in this initial survey of planners. The power and control of planning that practitioners exert is again confirmed. From the results of this survey, planning officials and practitioners combined self-report that they are 78.8 percent (103) of the primary actors who motivate the change to form-based code. Planning practitioners, from both the public and private sectors, evidently see the value of form-based code in their communities. Whether the value is in less community process by the public sector planners, or a substantial increase in contracts and the resulting fees by the private practitioners, is not clear from the survey responses.

Together with many planning theorists including Healey (1997), Sandercock (1998), Banfield (1955) and Kromholtz and Forrester (1990), Friedmann (2012, 26) described the power that that planners hold. Friedmann lists three shifts: (1) addressing a "whole-society process rather than primarily a technical one," (2) planning as a political

¹³⁷ MIAMI 21 http://www.miami21.org/PDFs/AsAmended_April2013_Volume_I.pdf (accessed November).

¹³⁸ Denver Zoning Code http://www.denvergov.org/Portals/646/documents/Zoning/DZC/DZC_103014-web.pdf (accessed November 12, 2014).

¹³⁹ Cincinnati Zoning Code

art and (3) planners developing the art of “getting things done” by “planning in real time.” (Friedmann 2012). Friedmann described the second of his three shifts over the last half of the 20th century as having: “turned planning increasingly into a *political art*, with planners needing to be acutely aware of power and the difference that power makes (26).” Friedmann further states: “Today’s planners are no longer merely analysts advising politicians; they have (or can) become political officials in their own right” (26).

That planners who motivate change to form-based code are the primary actors who formulate the decision, advocate and educate the community regarding the advantages to change to the new code, is a new reality that is often not recognized. Friedmann (2012) and Forester (1999), along with the previously listed theorists, understand the power that planners hold and their influence over political actions. Planners possess an inordinate amount of power over process, politics and property, which amazingly some disregard. Further research into the impact practitioners have on political and elected actors will, no doubt, add to the discussion.

But this is not the entire story, as was validated by the city case studies. While planners list themselves the primary motivators for change to the new code, mayors and city council members were noted second by the survey respondents as the primary change leaders. As discussed in two case studies, elected officials who led the approval for form-based code lost their next election in Cincinnati and Miami. Regalado in Miami and Qualls in Cincinnati were advocates and elected officials who advocated for form-based code and lost their city-wide mayoral elections to opponents who expressed

distrust of the new code; Cincinnati Mayor Cranley called the code “scary.” Essentially, the neighbors who organized against the new code voted the advocates out of office.

Cincinnati is currently working on a new zoning code and deciding how to address the three neighborhoods with approved form-based code. Miami 21 is in place after the newly elected mayor tried to derail it. The business and residential community were engaged, and DPZ and other consultants had built a strong constituency. As one survey respondent mentioned, “Attorneys are busier than ever between the new code and new development.” Attorneys are interested. Newsletters noting that “increased design requirements... may effectively reduce development rights” are available. Additionally, “Because form-based codes are generally uncommon, the language of such codes is unfamiliar, the procedures established may be missing details or contingencies and city planning staff may be unfamiliar with the new vocabulary.”¹⁴⁰

6.5 The Effect on Practice

The second *Remaking Cities Congress*, sponsored by the Carnegie Mellon University and the American Institute of Architects, was held in Pittsburgh in November 2013. The first congress was in 1988, and its “primary focus was the precipitous decline of industrial cities and regions in North America and Europe in the 1980s. Prince Charles was the Honorary Chair and keynote speaker.”¹⁴¹ Representatives at this second congress included 300 invited “urbanists,” otherwise known as architects and planners, who were invited to participate. The two-day docket of presentations and discussions

¹⁴⁰ First Major U.S. City to Adopt Form-Based Zoning Code http://akerman.com/documents/PU_Land_Use_Miami_21.pdf (accessed November 12, 2014).

¹⁴¹ 1988 Remaking Cities Congress <http://www.downtownpittsburgh.com/do/remaking-cities-conference> (accessed August 22, 2014).

primarily focused on emerging equity in “all its manifestations—social, economic, and environmental.”¹⁴² The congress will continue to present the physical manifestations of equity—recreated neighborhoods and innovation districts—in a variety of media articles.

The Congress was built upon by the Mallach (2013) Lincoln Institute of Land Policy *Regenerating America's Legacy Cities* report, which lists policies for rebuilding cities that encourage planners to promote strong central cities by: rebuilding the central core; protecting neighborhoods; repurposing vacant land; and building competitive advantages. This report provides the working game plan for the 21st century. Together with the working paper for the Pittsburgh conference, there is a call to arms in effect that advocates for strong leadership from the planning community and the engagement of civic and business communities. These are described as the foundation for network building needed to result in successful cities (Safford 2004, Putnam 2000). Design was mentioned as the necessary planning element that is fundamental to the discussion of how to build the 21st century city. Participants pressed for change asking that planning emerge as a design form in lieu of the current legal administrative role.

The network-building that occurred at the Pittsburgh conference could be impetus for planners to move into political and leadership positions in the next century. The conference had a distinct undercurrent of New Urbanism, due in part to the presence of representatives from the Prince of Whales Foundation, who are strong advocates. Significantly, practitioners were primarily planning in the cities that have recently

¹⁴² 2013 *Remaking Cities Congress*, <http://www.cmu.edu/rci/congress/Home/Outcomes-of-Congress.html> (accessed May 13, 2014).

adopted form-based code. There appeared to be a goal, although unstated, to further New Urbanism.

Planners who advocated for form-based code are required to understand the complicated process required to produce the code: the charrettes, discussions, regulating neighborhood plans, transect design, and writing of Smart Code©. This process is strictly defined, as illustrated in Parolek (2008). The network of private and public sector planners who are engaged in form-based code is a tight community. Consultants are more likely to be awarded a contract if they are approved and registered with the FBCI prior to being selected to work with communities on their new code. These consulting contracts are lucrative; estimates of Cincinnati's consultants' fees are close to one million dollars, as are the contracts in Miami and other locations. Survey results indicate that although the time, cost and process did not decrease. It is assumed that the zoning ordinances were completed and the consultants were paid.

Interviews indicate that implementing form-based code may require more planning personnel and tools to successfully implement the new code. There is some concern that consultants do not adequately inform communities as to the effort involved to implement new codes.¹⁴³ Speakers in the Chicago 2013 APA meeting noted that Arlington County needed to hire more staff planners to implement the Columbia Pike form-based code. Farr (2012, 33) states; "form-based code... seeks to replace existing zoning code with new codes of breathtaking clarity and simplicity." The issue of needing additional staff for implantation was not included in the survey protocol but should be included in a subsequent study. In regard to additional work a respondent said;

¹⁴³ Conversation with Michael Dobbins, former Planning Commissioner, City of Atlanta by author, November 10, 2014.

“What we have found is that a significant amount of development projects end up at the Board of Adjustment because of form-based code requirements” and in contrast “The illustrative plan is clear and the regulatory plan give the Planning Director more admin[istrative] freedom.” Regarding Miami 21 Gonzalez states:

The biggest challenge with form-based codes is in the implementation stage. Prior to a municipality adopting such a code, testing of actual projects in different parts of the city is crucial for its successful implementation. Such testing should include different scenarios and taken into consideration existing conditions of the city. This is one of the many lessons we learned as we continue to implement Miami 21.¹⁴⁴

Advocates for form-based code are passionate. Some even admit to promising too much in order to get the code approved (Rangwala 2013). Rather than describing the code as an option, they pursue an agenda that discourages *hybrid* codes. (It is worth noting that Denver and Miami describe their codes quite proudly as hybrids, primarily because they had to recode an entire city that often identified long term master plans that were in place or existing overlay districts.) Additionally, institutional, manufacturing and utility districts are hard to code as form-based. Form may follow function, but when the function is hard to define the form has a blind side (Leigh and Hoelzel 2012).

6.6 Future Research; “Cool Counts”

The prevalent literature on this topic focuses on what form-based code claims to accomplish and the faults of Euclidean zoning but the research is shallow. Elizabeth Plater-Zyberk and Ana Gelabert-Sanchez, experts on the planning and adoption of form-based code, mentioned they had not been interviewed for a case study on Miami’s adoption of form-based code prior to this research. Likewise, Roxanne Qualls,

¹⁴⁴ APA Planning and Law

<https://www.planning.org/divisions/planningandlaw/newsletter/2013/pdf/sum.pdf> (accessed November 12, 2014).

Cincinnati's former vice mayor, said she had not been interviewed. These are the experts on the topic, but no one is contacting them to understand the process and the work that goes into form-based code approval and the lessons learned by these pioneering cities.

While this research and the survey respondents state that it is too early to have enough data regarding the performance of the new code, there is substantial information about how the code was marketed, adopted and implemented. There are many planners, mayors or developers with lessons to offer: people who were and remain highly motivated to advocate for code change. Their voices should contribute to case studies yet to be written.

6.6.1 More Research Needed

This survey is the pilot study, a first: a base of information that lays the groundwork for factual discussion. The survey should be expanded to a larger group of planners, elected officials, and community representatives, with questions regarding adoption, implementation and results. The survey design was a much-deliberated process, with the final questions vetted among a variety of sources. Several practitioners and academics from the Georgia Institute of Technology IRB reviewed the survey, along with a smaller group of form-based code experts. Emily Talen, an Arizona State University planning professor, is considered an expert on form-based codes. A frequent speaker, author and one of the organizers of CodesShare, Talen sent the survey to her committee of experts for review. Suggested improvements include adding engineers to those surveyed and inserting a question about whether the adoption of form-based code is “easier to sell for smaller areas.” Several of the resulting comments are listed in Appendix B as potential revisions for the next survey. Additionally elements of the

survey should include addressing the issue of power and control along with the implementation aspects of the new code.

6.6.2 Zoning Begets Zoning; Policy Implications

From personal housing costs to historic preservation and economic development, zoning affects everything that occurs in communities. Indeed, “We had better recognize that the humble zoning ordinance is probably of direct concern to more people than any other statute” (Sussna 1966, 1031). Communities believe they need a change because their historic Euclidean zoning is complicated and obsolete. Many architects and planners believe that adopting a new form-based code will encourage new development and economic growth in their cities. But change is a choice and may not be the best one for every city. Design guidelines, overlay districts and pattern books work just as well in communities that have spent the time and effort to enact these methods.

Over the last hundred years since zoning was adopted in American cities, there have been many ideas to attract and increase development. Adoption of form-based code reflects pent-up expectation and perhaps frustration with other solutions that have not been effective. This quote is from a planning director in a rust belt Michigan town: “We anticipate that we will see great improvement in the manner to which development occurs (including) reduction in adjacent land use conflicts.” Their form-based code passed in 2010.

In and of itself, form-based code will not solve social issues or bring new industry to a city. Form-based code is not a proven economic development tool or jobs generator, nor does it solve market issues. The code regulates design in a complicated process that requires planners, local government, and communities new to learn rules.

While a widespread switch to the new code has not happened as quickly as FBCI expects, this research indicates that practitioners believe that form-based code does promote change that encourages objectively better cities—preferably the cities who want to attract talent and consequently capital. To quote Mayor Bloomberg’s comment to the Denver community, “Cool counts.”

APPENDIX A: ONLINE SURVEY

Request letter

Project Title: FORM V FLAT; IS FORM BASED CODE REPLACING EUCLIDEAN ZONING?

Investigators: Barbara Faga, FASLA and Catherine Ross, PhD
Address: Georgia Institute of Technology, School of City and Regional Planning
Telephone: 404-307-4008

Dear Elected Official, Planning Director/ Commissioner/Planner/Community Advocate,

You are among several experts who are identified as experienced with zoning and form-based code. You are being asked to be a volunteer in a research study.

The purpose of this study is to determine why communities change from Euclidean zoning to form-based code (FBC). As was discussed at the 2013 American Planning Association conference form-based code has emerged over the last 20 years as the implementation tool that many believe will change their communities for the better. Proponents describe FBC as the path to avoid arguments with the neighbors, offer the developer certainty in zoning, and ultimately encourage better and faster development. Currently there is little information to support this discussion. This research will answer the following questions: Why do city officials decide to change their Euclidean zoning to form-based code? What is their motivation for change? Who leads the change? Does changing to form-based code result in better planning and development for the region, city or neighborhood?

This survey will take approximately 15 minutes to complete. Your privacy will be protected. Your name and any other fact that might point to you will not appear when results of this study are presented or published. We are only interested in group information. The reporting of the experimental results will only contain group mean results and will contain no personal information about individual participants including performance on the experiment.

The risks involved are no greater than those involved in daily activities. You will not benefit or be compensated for joining this study. Records from the study will be kept confidential to the extent allowed by law. To make sure that this research is being carried out in the proper way, the Georgia Institute of Technology IRB may review study records. The Office of Human Research Protections may also look at study records. If you have any questions about the study, you may contact Barbara Faga at 404-307-4008 or Catherine Ross, PhD at 404-385-5233. If you have any questions about your rights as a research subject, you may contact Ms. Melanie Clark, Georgia Institute of Technology at (404) 894-6942.

Your participation in this study is voluntary. You do not have to be in this study if you don't want to be. You have the right to change your mind and leave the study at any time without giving any reason and without penalty. Your completion of this survey provides your consent to participation and is greatly valued. Thank you for participating in this survey.

Thank you for your time,
Barbara Faga, FASLA

1. Form-based code has emerged as the implementation tool that many believe will change their communities for the better. Proponents describe it as the method to simplify zoning, avoid arguments with the neighbors, reduce the focus on land use, offer the developer certainty with development rights, foster cost savings by the local government and developers, and ultimately encourage better and faster development (Diaz, 2013; Parolek, Parolek, & Crawford, 2008).

The purpose of this survey is to understand your perception of form-based code based on your experience.

Please provide your location.

Organization:

Department (or Division):

City/State:

2. Please describe your position. Check all that apply from the following list:

- ☐ a. Planning director
- ☐ b. Planner/ public sector
- ☐ c. Planner/private sector
- ☐ d. Attorney
- ☐ e. Community leader
- ☐ f. Public official
- ☐ g. Elected official
- ☐ Other (please specify)

3. Please describe your experience with zoning. Check all that apply from the following list:

- ☐ a. Write code
- ☐ b. Administer code
- ☐ c. Consult on code
- ☐ d. Architect
- ☐ e. City planner
- ☐ f. Landscape architect
- ☐ g. Urban designer
- ☐ h. Legal expert
- ☐ Other (please specify)

4. Do you have experience working with form-based code? Check all that apply from the following list:

- ☐ a. Designed and/or wrote the code
- ☐ b. Assisted with redoing the code
- ☐ c. Advocate for changing the code
- ☐ d. Built projects using form-based code
- ☐ e. Resisted changing the code
- ☐ f. Zoning review board member
- ☐ Other (please specify)

5. How long have you worked with form-based code?

- ☐ Never worked with it
- ☐ Few months
- ☐ One year
- ☐ Five years
- ☐ Ten years
- ☐ Fifteen years
- ☐ More

Other (please specify)

6. Please select the status of form-based code in your community. Check all that apply.

- ☐ a. Approved
- ☐ b. Approved and implemented
- ☐ c. Considered it
- ☐ d. Not approved
- ☐ e. Never considered it
- ☐ Other (please specify)

7. Who was the leader of the change to form-based code in your community?

- ☐ a. Mayor
- ☐ b. Planning officials
- ☐ c. Planning consultants
- ☐ d. Community leader
- ☐ e. Community organization
- ☐ Other (please specify)

8. Please name or describe the person/s responsible for changing to form based code.

9. How long did it take to change the zoning to form-based code?

- ☐ a. Six months
- ☐ b. One year
- ☐ c. Two years
- ☐ d. Three years
- ☐ e. Five years
- ☐ Other (please specify)

10. Was there a lot of discussion regarding the change to form-based code?

- ☐ Yes
- ☐ No
- ☐ Other (please specify)

11. Could you describe the discussion?

12. Based on your experience working with form-based code is it achieving what was intended?

- ☐ Yes, it is excellent
- ☐ It is working well
- ☐ Not much change
- ☐ There are problems
- ☐ It is not working

Other (please specify)

13. Please rate the outcomes for zoning based on these three characteristics 1) time, 2) cost and 3) community interaction that have occurred since you began using form-based code to rezone parcels in your community. Check all that apply.

	A lot more	More	Somewhat less	Much less	No impact
a. Time needed for rezoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cost/expense to rezone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Public process and community interaction to rezone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

14. Please list up to four outcomes that you expected as a result of the change to form-based code?

First	<input type="text"/>
Second	<input type="text"/>
Third	<input type="text"/>
Fourth	<input type="text"/>

15. Using your responses to #14 please check the results you expected for each of the four effects.

	Very impressed with big change	Yes, there was some change	There was impact but not noticeable	There was little impact	There was no impact
First	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

16. Did zoning applications increase or decrease with the change to form-based code?

- ☐ Yes, increased by a lot
- ☐ Increased some
- ☐ Increased
- ☐ Not much increase
- ☐ No impact at all

17. Is there additional information you would like to provide?

18. Can I contact you for follow up information? If so please include your contact information, name, email and/or phone number. You will not be quoted or identified unless you give written permission.

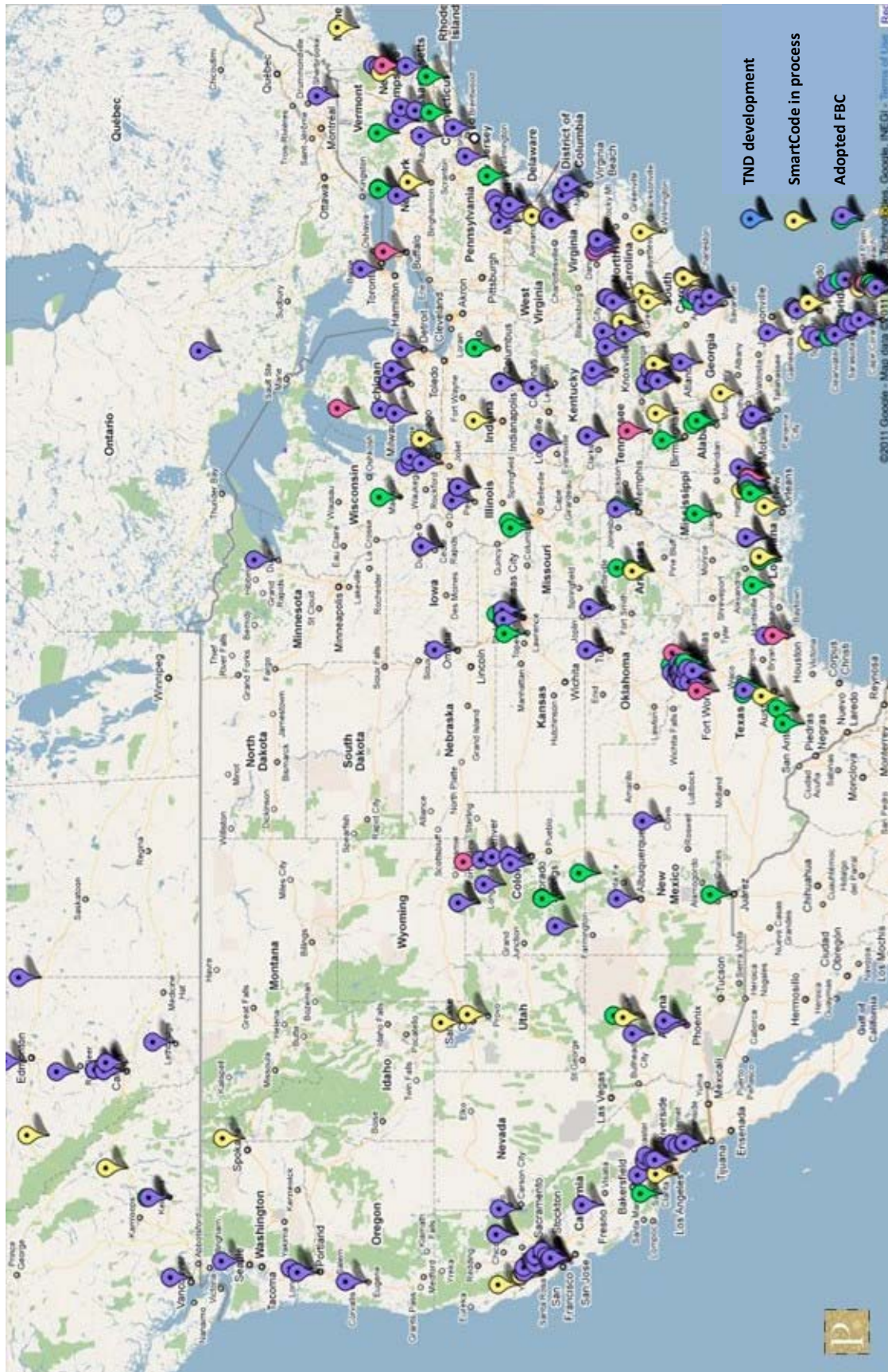
Thank you for your time and information.

**APPENDIX B: COMMENTS ON SURVEY FROM
THE FORM-BASED CODE GROUP**

APPENDIX B: COMMENTS FROM THE FORM-BASED GROUP

“I occasionally see but find odd: the term “form-based code” without a proceeding “a” or “the.”
“Add “Engineer”; engineers are often very involved in writing, administering, or following codes”
“Grammatically, I feel a bit uncomfortable when in many questions 'form based code' is used in singular and without an article.”
“Some places may be in the process of [adopting an FBC] and there is no question to address that situation or experience.”
“Is the FBC for the entire city, significant portion of the City (downtown, for example), or a specific district/node. This will make a difference in how/why FBC are adopted. Easier to “sell” for smaller areas. But ultimately, I think the planning world is wondering what will happen when they’re city-wide (and if they never are, we need to know why).”
“The survey is missing an important question, the Why. Why the City/Municipality wanted to change to Form Based Code in the first place?”
“There is interest with our Placemaking Team here (State of Michigan, Michigan State University, and Michigan Municipal League) to run a variant of this survey to the MML membership (just about every MI city/village).” Director - Community Development Division, State of Michigan
“The way she is using the term "form-based code" is awkward—almost more like "computer code". I think the more common/appropriate term in most of her questions would be either "a form-based code", "form-based codes" or "form-based coding".”
“I suspect that I may be among the “surveyees,” once this is administered, as an elected official who has been involved with adopting and implementing FBC for more than a decade. From that perspective, it is on the whole a good instrument that I don't think will scare off too many people like me, either for content or length. But I wouldn't let it get too much longer.”
“I think this research could be very helpful for us. Also, I notice that the researcher is a landscape architect, which is interesting because I’ve not seen a lot of landscape architects show interest in this yet. Please keep us informed of the results of her research, thanks!” From formbasedcodes.com
“The survey doesn’t make clear whether it’s a citywide form-based code or a smaller area”
“Nearly all form-based codes start by being applied to a specific geographic area, far smaller than the entire local government’s jurisdiction. Only one of the three major classes of form-based codes (floating-zone codes) is implemented through individual rezonings; the two larger classes are not.”

APPENDIX C: FORM-BASED CODE LOCATIONS
FROM THE CODES STUDY



THE CODES STUDY <http://www.placemakers.com/how-we-teach/codes-study/> (accessed November 11, 2014)

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